

S T U D Y A S S O C I A T I O N

G E W I S

 **SUPREMUM**

VOL 57 Nº 1

**THE
FRACTAL
EDITION**



EDITORIAL

There are few things I love more than when life goes according to plan. One of those things is actually creating the plan! Sadly, this edition my planning was hard to upkeep due to the cyberattack and issues with Adobe (classic), but thanks to an amazing committee working hard to catch up, Supremum 57.1 has now arrived at your doorstep.

EDITOR IN CHIEF Lotte Lakeman

Last edition I talked about bringing back quotes in the editorial section of the Supremum. This edition, I decided not to. If you, however, feel very passionate about quotes at the start of the Supremum, you can send one to me directly at supremum@gewis.nl. Though in a way one might argue that the editorial is always a quote, one from the editor in chief.

When I first got interested in mathematics and YouTube caught on to this fact, it would constantly recommend me videos about the Mandelbrot set fractal. These videos were likely my introduction to the concept of limits and fractals. At the time of watching those videos it felt as if I knew everything about them. However, now that I know more about them, I feel like I know less and less...

In this edition of the Supremum, you can read about what fractals mean to the members of GEWIS and the faculty. The new FYCs will introduce themselves (all 5 of them!) and we will also take a look back at the introduction week's dinner at parents. Prof. dr. Hans Sterk will take us on a journey of dreaming and the fraternity In Vino Veritas will grace us with a new recipe. This and more are just mere pages away from you. We thank you for opting in for the Supremum and continuing to read it .).

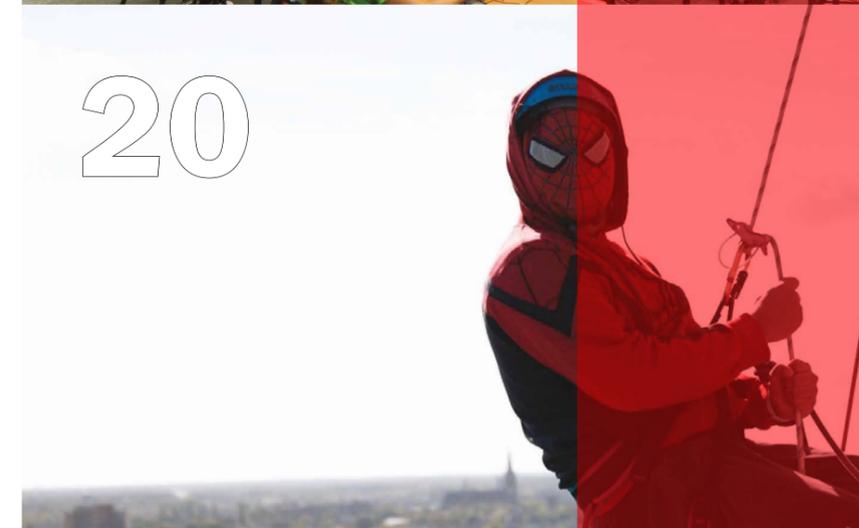
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CHAIR'S NOTE

One of the perks of being the chair of GEWIS is that I have the right to start the GEWIS song! And while I love our song, one line never seems to make any sense: "Daar huist aan het eind van vloer acht ons GEWIS". Which translates to "You'll find at the end of floor 8 our GEWIS". Which is remarkable, because our member space is located on the 3rd floor and not the 8th. It turns out that our member space was not always in MetaForum, but that we moved there a few years back. With the help of my predecessors, I looked into the details of this big move and in this article you can read all about it!

TEXT Tessa Verheul

Not only our member space used to be in a different building, the whole department of mathematics and computer science was located in "Hoofdgebouw", which is now known as Atlas. Here GEWIS had a large room on the 8th floor, which is also the place our song is referencing to. A fun fact is that exams also took place on this same floor! But Hoofdgebouw was quite old and in need of a renovation. Rumor has it that in our last few years in Hoofdgebouw, there even needed to be a fireman present during exams as they could no longer guarantee fire safety.

Thus a change was needed! And the university had big plans for that. It would not just be a renovation, but also a restructure. Next to Hoofdgebouw, there was the building "W-Hal" which they planned to demolish and rebuild. This building would become the new home for the mathematics and computer science department, and thus also for GEWIS. Additionally they planned to include a big collective TU/e library in this building, which would mean the end of the department specific libraries the TU/e had at that time.

However, these plans were not well perceived by everyone. W-Hal had a unique design, For example: its roof was following a checkerboard like pattern of higher and lower parts, which allowed rays of sunshine to shine through, but also the color choices and building style stood out. Some people protested against its demolition, and with success. The building was declared a national monument, because it was considered part of the industrial landscape and because it had (inter)national significance due to the consistent application of the module dimensions.

Consequences of the protests were, that the university needed to come up with a new plan and that our move was postponed. Instead of demolishing and rebuilding, they decided to expand the W-Hal. An underground expansion would be built, as well as a new construction on top of the roof! This would honor its national monument status, as well as provide enough space for their initial plans. Afterwards the building was renamed to MetaForum, which is the name we still use today. This also explains the difference in the architecture style between the top and the bottom part of the building as we know it today.

On the 6th of July 2012, the day finally came, we could move to our new room in MetaForum! Which was a bigger task then it might seem. Luckily GEWIS installed a motivated committee called GEBOUW to lead the move. As we were the first users of this newly built room, a lot had to happen. On the picture below you can see how plain and empty the room was at the start. But thanks to GEBOUW, the walls were quickly painted red, our beloved bar was installed safely, our kitchen was installed, and much more. Now it was time to move our possessions and officially move in!

But similar to fractals, the number of decorations we had in our previous room was endless. So, we could not bring everything along, to be more precise we could not bring most of it along. So GEBOUW organized a big auction social drink where members could bid on these items and the highest bidder could take a piece of decoration home. This included study trip decorations, a firepole, a cow statue, hardware, a coffeetable, spot lights, signs and much more crazy items. There was a big show up and luckily most items could be given to our members. This was also the last social drink held at our old location.

The final step of our big move, was a celebration. Which was done in style, by organizing a grand opening social drink in our new member space! Which was the first ever social drink like we know it today.

From that day onwards, the lyrics of the GEWIS-song were no longer accurate. For some reason, these were never changed throughout the years. What do you think, should we change it to 3rd floor to make it correct and describe our current location or should we keep it as 8th floor so it reflects on our history?

“ The building was declared a national monument, because it was considered part of the industrial landscape... ”





EDUCATION FIRST

After my first year of university had ended, I enjoyed my holiday break a lot. After that I could come back to Eindhoven well rested to start my second year of applied mathematics. It promised to be an even more fun year than the first. Covid had completely disappeared, I could see my friends again, and I would start with some very fun new courses which I had not yet seen in my first year!

TEXT Jelte de Kock

So there I was again, back in the lecture halls and studying after a vacation of doing absolutely nothing. However, this time around, people expected I was able to follow along from the start, and the tempo was much higher than the first time. Luckily, for this quartile, I only had three courses. A project course, where I made an automatic blind shutter, better known as Cool-Ray. A course just like any other course. And I started the educational minor this quartile to try and get my teaching license. These courses made it such that it was a lot different than in my first year, as it were a lot of reports to write, and not a lot of exams to make, which was a nice change of things.

I started quartile two with no additional courses. This made me confident that I would also pass all courses this quartile once again. As I only had another project course, and two exam courses. However, one of these courses was probability theory, this course turned out to be a lot harder than expected, and it would haunt me around for a long time. Because besides having a modeling project, which I was still struggling with a lot, it also had biweekly midterm tests, and a final exam of which I still have nightmares sometimes. Luckily the other two courses went better than expected and I thus passed two, taking probability with me to the next quartile for a new round.

In quartile three something would happen which I had not done before. I would do four courses at the same time, one of which would be my first internship at a high school, and the other was programming, which I still had to do from last year. I prepared well, however already after the first week I noticed that this would

be impossible to do, so I decided to immediately drop one of them. This gave me a bit more rest, but still a very high workload. The internship and programming once again took a lot of time, and I did not like either of them. Fortunately, I passed them both, but it did result in me quitting the educational minor. On a bright note, this quartile I also followed a new course called Algebra and discrete mathematics. Some people would describe it as the follow up of set theory. And even though it was very difficult, I really enjoyed it and found my favorite branch of mathematics in that field! Unfortunately, due to the already impossible workload, I also had to skip my probability resit and take it with me to the next year.

After the very stressful third quartile, I was looking forward a lot to the final quartile of the year. Summer would come back, I would do new courses, and a lot of exciting things would happen! Boy did that disappoint. As one of my electives I had taken a computer science course; it made me very happy I chose mathematics. Next to that was functional analysis, which was the most difficult thing I had ever seen in my life, so I quit after one lecture, and stochastic processes. I was very scared for this course, as probability theory was very difficult. However, it turned out to be a very fun course, with a project I also enjoyed doing a lot! Unfortunately, due to all the other exciting things that were happening, I neglected my studies a bit and did not manage to pass any courses this quartile. But I did not let that stop me, as I had made even more friends, did a lot of fun stuff and was feeling motivated again to begin my third year, even though I already knew now it would not be my final year.

DREAMING

It felt a bit strange, flying in a modern machine in order to visit ancient sites, but it had been a longtime wish that was now to come true. Over the years, I had read and studied quite a bit of material and now the moment had come to complement all this with the actual 'historical sensation'.

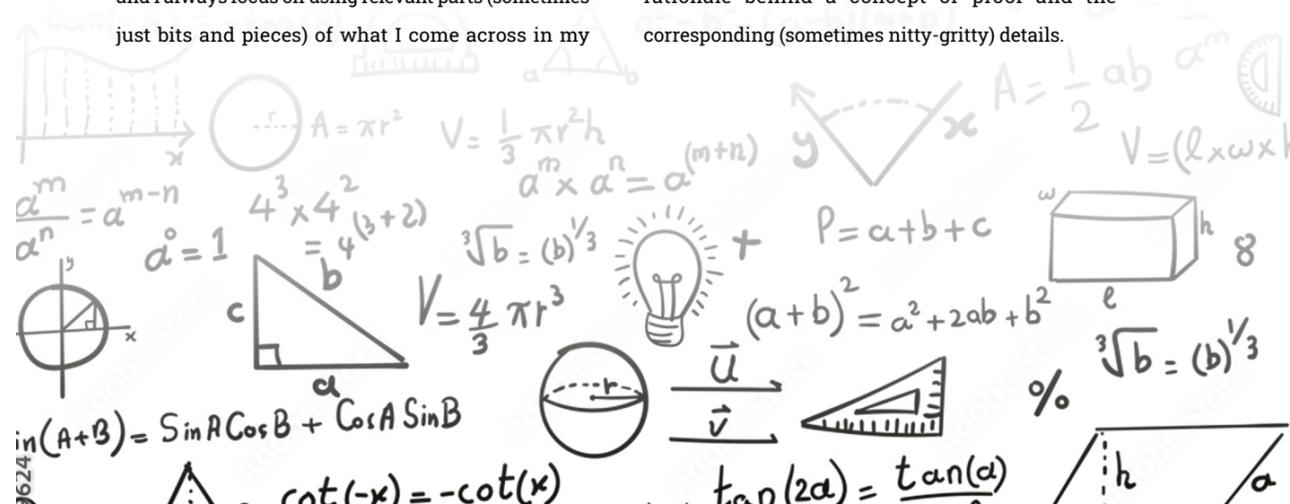
TEXT Prof. dr. Hans Sterk

I was in Athens, as a tourist, but didn't forget my mathematical glasses when strolling around the many historical places. Always on the look-out for patterns of symmetry in architecture or other traces of science. Of course, you don't see the actual theorems of the Elements (Euclid) floating around, but walking around the places where, say, Aristotle is assumed to have taught, does re-inspire to study the ancient, in my case mathematical, achievements and the many commentaries that were later given with new enthusiasm. Some months later, when traveling through Germany, I couldn't resist the temptation to visit another place once of great mathematical importance, Göttingen. A quiet provincial town, where people like Gauss and Klein had lived and worked, and also the place where Emmy Noether rose to prominence as one of the first female stars of mathematics. There were many young people on the streets, would they even know of the rich scientific history of their city?

Although it is definitely nice to visit such places, it never is the end of the story for me, but rather the beginning of a journey through even more books and other sources, and again that is not where it stops. I am always trying to relate to modern mathematics and I always focus on using relevant parts (sometimes just bits and pieces) of what I come across in my

teaching. For example, recently, I studied the works on ellipses, parabolas and hyperbolas by Johan de Witt (1625 – 1672), well-known here in the Netherlands as a statesman, but less known as a (talented) mathematician. I then incorporated it as a worksheet, linking to modern elements, in my History Of Mathematics course in such a way that – I hope – students experience how views on and working with mathematical concepts change over time, and that it takes them back a bit to those days, in spirit that is.

Maybe that's an important strand in my teaching, not just presenting things in a mathematically ordered way, but also trying to give it the flow of a story - not always bringing in historical aspects by the way -, usually with ingredients picked up over the years I worked and taught in mathematics, and always trying to convey the message that students and I are taking part in a human endeavor. And in this endeavor we can shape the mathematics, to some extent of course, to our needs. To me, the story aspect means the topics of a lecture are connected in a natural way, and offer the possibility for students to jump on the train again at various places in case they got lost at some point. But it also means I make an effort to explain both the rationale behind a concept or proof and the corresponding (sometimes nitty-gritty) details.



Over the years I have aimed at making my own blend of (what I think are) nice techniques in teaching that I observed among my own professors and among colleagues. One of my professors managed to create perfect lecture notes on the blackboard without being boring, another one always focused on the main ideas and didn't bother about details, and both did a splendid job in my view. I never considered copying what yet another professor (oh, those physicists) did though: lock the door once the lecture started so that late comers couldn't get in. In addition to using generally accepted 'proven techniques' in my teaching (I hope), I like to add and experiment with a personal touch and look for new ways of explanation or interaction ('the didactics is in the details'). And I think this blend of mine should still be called work in progress, even after all these years. It's never done, I always think there is room for improvement. That's part of my teaching nature. Apart from the storytelling, I hope to install an intrinsic drive in my students to discuss and explore mathematics (and this I still find one of the greatest challenges).

As for installing such an autonomous drive, let me recount, from my own experience as a student, a memorable exam I once took. It was an oral exam on number theory, and it was based on an assignment I received some days before and which was written on a very tiny piece of paper: $Q(\sqrt{2}, \sqrt{5})$, that was all. By the time the oral exam took place I knew of course practically everything there was to discover about this number field. The assignment had made me cross a threshold and move from let's say the status of a novice to that of a serious mathematical discussion partner. Alas, such exams don't scale that well. And now, after so many years of teaching, you can probably guess whether I found the holy grail in teaching: I keep on dreaming.

Hans Sterk

LIGHTHOUSE

We are the new Lighthouse, a student-led initiative here to support you at TU/e! Our mission is to advise the university on ways to include and better support students managing impairments, chronic illnesses, mental health issues, and other challenges. Moreover, we want to create a safe space and community where all students feel welcome.

TEXT Lighthouse

Let's start with our history: Lighthouse is not new at the TU/e. The old Lighthouse was a student initiative focused on mental well-being. Then it began to evolve to a platform focused on students who need extra support from the university on all kinds of topics. Now Lighthouse is not only a platform on Teams, it's becoming a community; a space where students can find other peers to share their experiences and struggles or lend a listening ear.

The advisory committee was first named Study+ but it's now named Lighthouse as well. Our committee advises the university on extra support for students during their study, aspects of wellbeing, or the inclusion of these students in our university. We help with questions such as: Are the buildings accessible for wheelchair users? How can we include everyone during the introduction week? How can we create more awareness for this group of students? We are involved in the SAO, well-being chain meetings, and more! Recently Lighthouse made a trip to TU Delft to discuss how they organize the support for students and to try out the power nap pods they have. These collaborations are important for sharing ideas and learning together.



Now you might be wondering what the Lighthouse platform is. It's a moderated group on Microsoft Teams that only students of the TU/e can join. When you enter the platform, you need to go to the channel 'Microsoft form', where you can sign up for our private support channels, such as mental support, neurodivergent support, and physical support. In these channels, you can ask other peers questions and find information related to the topic. You can scan the QR code to join it!

Next to the platform, Lighthouse organizes relaxed, welcoming events and workshops on handling academic and personal challenges. For example, we had a relaxing movie night in the new building Pollux where we watched Inside Out 2. In collaboration with TINT and COSMOS, we organized Food for Thought, an evening with dinner and a board game that helped discuss personal and academic struggles. If you'd like to be updated on our events follow our Instagram: Lighthouse_tue or join the platform.

If you have any questions or if you have any ideas, don't hesitate to contact us at lighthouse@tue.nl. We can help each other navigate through the waves of university life!



EGOI 2024

Ever seen an Indian, a Mexican and an Australian team solving questions about the marathon of Eindhoven and the flowers of Keukenhof in a European contest? We did! Last summer, from 21 to 27 July, Eindhoven was the host city of the European Girls' Olympiad in Informatics (EGOI) 2024. This programming competition started in 2021 in Switzerland as the informatics version of the European Girls' Mathematical Olympiad. Its goal is to overcome the gender gap in computer science, because most participants in programming competitions like EAPC and BAPC are still male. In only four years, this originally European event has grown to an international competition with 200 girls competing for a medal, which gave rise to philosophical questions like: how do you define a European country?

TEXT Dirk Burgers, Femke Voogt, Hannah van Egmond, Lotte Lakeman

EGOI 2024 EXPERIENCE

We were asked to be so-called "super-guides" during EGOI 2024, which means we would help with the daily organization, guide the guides, and sleep (not that much) and eat (way too much) together with all those 56 teams in the 4-star hotel Koningshof in Veldhoven. Of course we said yes! In this story, we will share our experiences of this wonderful week with you.

COMPETITION

It truly is a sight not many of us have had the pleasure to behold: a magnitude of laptops all seemingly turning on at once. After hours of working late in the evening, and being busy troubleshooting, this sight became a reality for us. At last, the technical side was just as ready for the competition as the competing girls. As late as the evening ended, so soon came the next morning for us. The competition started early, therefore, we set up a so-called 'wake-up team' running around the hotel, banging doors, to wake up the final contestants.

Thankfully, this team was a success and the contest could start on time with everyone in their seat, ready for the competition. For the girls, this competition meant hours of solving programming problems. For us, this meant helping them with whatever non-technical concerns they might have had. During the contest, we encountered one of the biggest dangers one can encounter during such events: the "Eratigena atrica". This is a vicious creature which can span up to 18 millimetres. Thankfully, one of the brave guides on our team helped when one of the contestants encountered this beast. With nothing more than a blank sheet of paper and determination, this guide saved the contestant by squashing this wild animal.

Even though a spider sign was missing, the girls had four other signs to communicate speechless with us. One of these signs was to request a toilet break, which created a mathematically interesting queueing system with the peak number of requests around 2 hours after breakfast. Since there was not much to do for us while the girls were solving puzzles, we also solved some hard mathematical problems. For instance, what is the shortest path from a seat to the toilets? Or what is the best scheduling plan to maximize the number of guides surveilling during peak hours while minimizing the consecutive surveillance time?

Have you ever wondered how such a competition with so many native languages is organized? All the questions had to be translated. As no one could do this better than the team leaders, they did this late in the evening while the girls were sleeping. Of course, different approaches exist for this; One would think that the best method is 'just' translating, so you can catch some sleep, or just being the USA team and not needing any translation. However, there was one team leader that wanted to have the best translation and therefore first solved all the questions, resulting in a long long night!

HOTEL

During the EGOI, all of us could stay at the all-inclusive luxurious four-star hotel Koningshof in Veldhoven. This enormous hotel was quite a maze. Running through the corridors we luckily found our way. It also did not help that the leader of the EGOI didn't have a phone, quite exceptional nowadays. But we also did not use our phones a lot, and they essentially became pedometers. During the week we took as many as 120.000 steps (around 90 km)! Eventually, we also found out that there was a pool hidden inside this maze. Obviously, we made use of it as soon as we found a small window in our incredibly busy schedule.

Additionally, there was a buffet of food ready for us every morning. This included yoghurts, pancakes, waffles and much more. During dinner there was also a wide variety of food, however the combinations were questionable sometimes. Some of us had lasagna with kibbeling as dessert!



ADVENTURE

Beside all the programming, there was time to discover Eindhoven! On Wednesday, we all went to Strijp-S to watch a movie, do some arts and crafts at De Ontdekkfabriek, and visit the MU Hybrid Art House. And we can tell you, taking 200 girls with you that are tired from waking up early and going sightseeing, is a whole challenge. Especially when there is an ice-cream parlor nearby.

Where there is a competition, there is a winner. Thus on the last day we went to the campus for the award ceremony. The chances of being a medalist at such an event are actually relatively high, as around 47 percent of the participants either get a gold, silver or bronze category medal.

Ever wondered why you should study stochastic operation research? Because then you know how to deal with extremely rare events like a power outage during the talk of the biggest sponsor of the event! Luckily the technical support was quick and we could continue the ceremony. After all winners had been awarded their medals, there was a party in Atlas, including a DJ, hardcore music, and lots of dancing! We went from one party to the other, and we closed off the week with a party in the hotel. The girls had been well acclimated, which could be seen from the fact that just before the party started the girls of the German delegation requested 'Links-Rechts' by Snollebollekes. It was an amazing experience to jump on the stage in front of them to guide them one last time and make them all jump "Links" and "Rechts" together.

From this week, we not only keep nice memories but also good friends, cute presents from countries all over the world and of course the cute Dino :).





MEMBER

WHY YOU ARE A CYBERSECURITY PROFESSIONAL

* For the past 10 months, I have been taking a deep dive into Office 365. More specifically, I have been looking into intrusion detection in Office 365.*

TEXT Rink Pieters

Intrusion detection is the process of detecting any abnormal behaviour for security purposes. It typically involves significant amounts of logs in which only a few items are interesting. The art of this detection process is in deciding what is relevant and what is not. Similar to a fractal, sometimes you want to zoom in to see all the details you need; at other times, you want to zoom out to get an event in context.

Imagine, you are observing audit logs for the TU/e. It is a Friday morning at 8 am, and you observe a student accessing their email from the campus. Having some experience with Thursday evenings yourself, you know that this is highly unlikely to happen, but before you reach that conclusion, you have already made some assumptions. My thesis [5] focused on determining what information is available in logs for Office 365 and whether that is enough to detect such anomalies. In the ideal world, a monitoring tool can automatically detect this and 'alert' on it. A so-called *analyst* should then be able to act on this alert after some basic verification.

“ Having some experience with Thursday evenings yourself, you know that this is unlikely to happen... ”

The work uses a matrix of well-defined techniques that attackers are known to use, such as the usage of 'email hiding rules'. For these techniques, I defined one or more ways of implementing this technique. After defining and executing some 75 attack simulations, we had about 30 MB in logs. It was then the task to really zoom in on the individual logs and decide whether detection would be possible based on the output of the logs. There are some nuances in how we detect them, and sometimes we expect them in a different log (see e.g. [1]), but overall we have a detection rate of about half in *cloud application logs* (see Figure).

We could discuss all tested attack techniques, scenarios, and methods here, but I will refer you to the work if you are interested. I will use this page to zoom out and place the thesis in context. Also, in contrast to what is typical for academic works, the *Supremum* editors did not restrict the inclusion of some personal opinions here and there, so I will use this opportunity to do so.

Office 365 is a very popular product. It is estimated that almost 90% of Fortune 500 companies and 95% of top 2.000 universities use one or more of the products [6]. Office 365 is typically used for business-critical operations such as email or file sharing. This considerable popularity, in combination with this criticality, also means that an exploit can most likely be used against many potential victims and thus have a significant impact.

During the project, I was often surprised about apparently bad design choices; surprised, but also curious as to how this came to be. Office 365 as a cloud product started in 2008, and Microsoft launched Exchange and SharePoint 10 years before that; could that have caused all the mess? I believe that this long history causes a significant part of the incompleteness and inconsistencies. Back in 1996 – when shares in Microsoft were cheaper than a sandwich from the TU/e canteen today – *getting it done* did not include thinking about compliance & logging 30 years later. Later, Microsoft created one central logging solution. While the logs can be accessed in one place, the contents of the logs and when they are created are far from standardised. After many years, each operation can be performed in at least a handful of different ways. Unfortunately, that also means a handful of varying log outputs for essentially the same action exists. The IT community often makes fun of Google [4] for discontinuing many of its services, functionalities and interfaces, but this may very well be a better strategy in the context of security.

Microsoft recognises [3] the challenges it faces in the cybersecurity field. I think all software providers should think about the security of their products from the start, and enterprises should demand enterprise-grade security features from the products and services they buy. With the move to the cloud, security can no longer rely on not having physical access to the network that houses the server; that server is accessible from everywhere.

You may build some of these applications. You may become a cryptographer, security analyst or pentester, but many of you will not. I believe that security and compliance are core functionalities for any system nowadays, and they concern everyone, not just if it is part of your job title. For the developers or consultants among us, this may be during the creation or deployment of a system, but security is relevant to any user: go to the security awareness training, and look into best practices! Everyone has a job as a cybersecurity engineer, only for some it's their primary job.

PS: If you are wondering why you still see me around when I have finished my degree: I have always enjoyed being at TU/e and in this department and am now working for LIS as a research IT consultant at M&CS.

[1] Cracea, Ș. (2023). *Security Analysis of Azure Active Directory Logs using Machine Learning*. [Master's Thesis, Eindhoven University of Technology]. <https://gew.is/idaad>

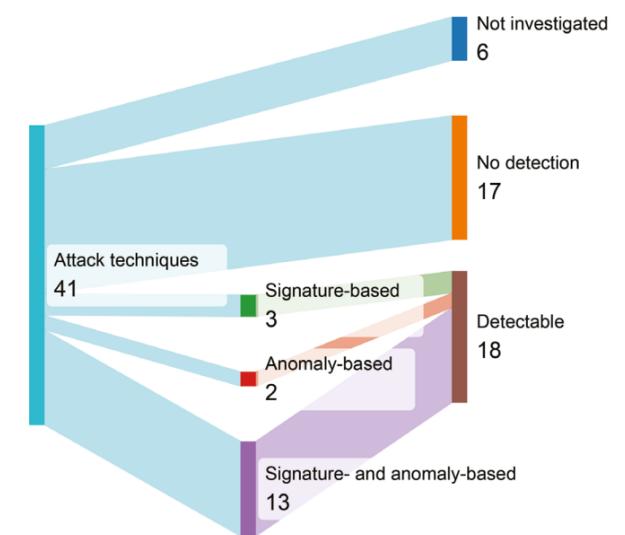
[2] Munroe, R. (2017). *Security Advice*. <https://xkcd.com/1820/>

[3] Nadella, S.N. (2024). *Prioritising security above all else*. [Blog post, Microsoft Corporation]. <https://blogs.microsoft.com/blog/2024/05/03/prioritizing-security-above-all-else/>

[4] Ogden, C. (2024). *Killed by Google: A tribute and log of beloved products and services killed by Google*. <https://killedbygoogle.com/>

[5] Pieters, T. (2024). *Opportunities for intrusion detection in cloud productivity environments*. [Master's Thesis, Eindhoven University of Technology]. <https://gew.is/idcpe>

[6] Syyrimaa, N. (2022). *Exploring Azure Active Directory Attack Surface: Enumerating Authentication Methods with Open-Source Intelligence Tools*. In: SCITEPRESS - Science and Technology Publications vol. 2, 2022, pp. 142–147. ISBN: 978-989-758-569-2. DOI:10.5220/0011077100003179. <https://gew.is/idpop>



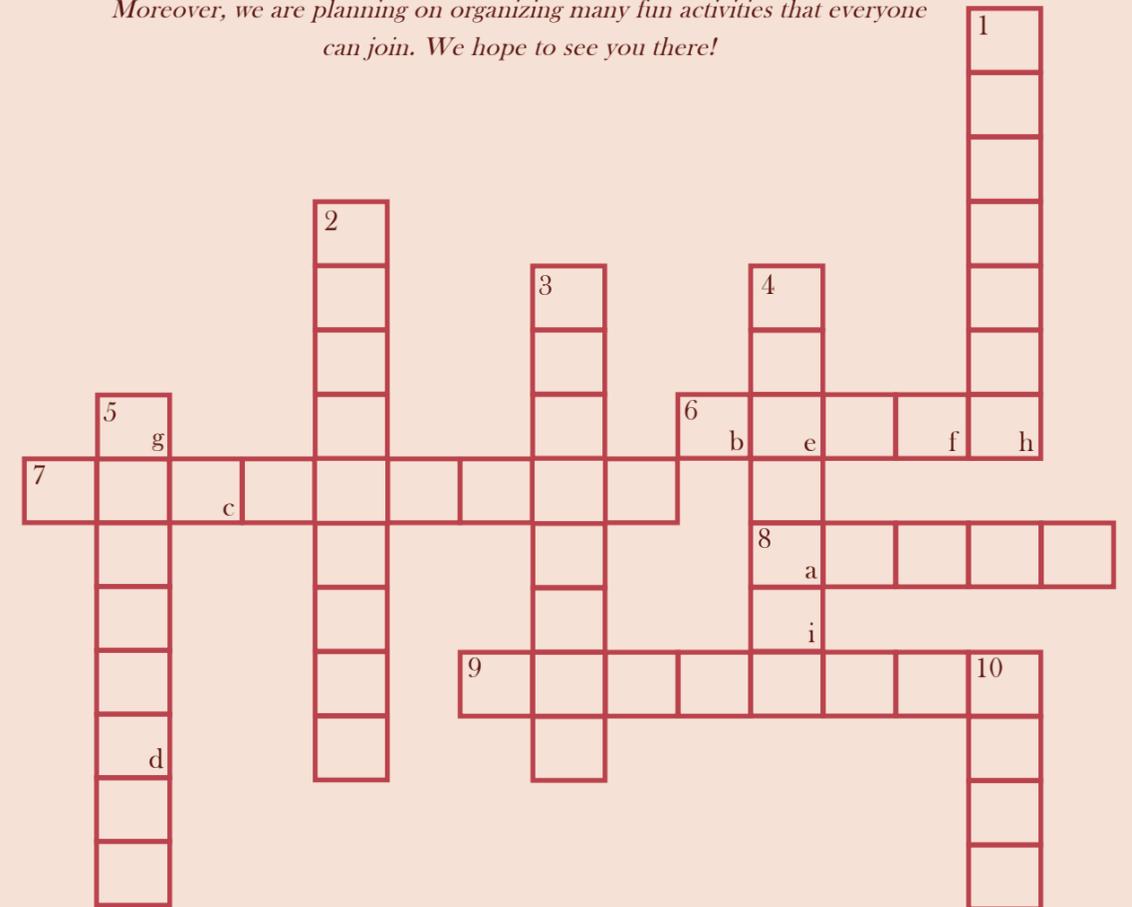


FYC 25-1 OMNIS



FYC OMNIS

We are Omnis, the most fun first year committee of this year. Omnis is Latin for 'everybody'. We chose this name because we live, laugh, love with everyone. Moreover, we are planning on organizing many fun activities that everyone can join. We hope to see you there!



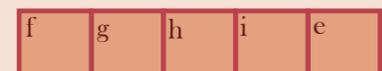
Vertically:

1. The name of the Roman God of wine and drunkenness
2. A prisoner trained to fight in the amphitheatre
3. The volcano that covered Pompeii in ash
4. Who the city of Rome was named after
5. the temple dedicated to all Gods
10. The abbreviation: "The senate and people of Rome"

Horizontally:

6. The name of our FYC
7. The official name of our mascot
8. The language that was spoken in the Roman Empire
9. The first emperor of the Roman Empire

Solution:



WORK EXPERIENCE AT EVENTIX

Years ago, when I was part of the Supremum, I used to tell people that writing for this column was easy, and the column would write itself. Let's see how full of BS I was back then :) I'd like to tell you about my experiences with my current employer Eventix.

TEXT Mart Pluijmaekers

During my fourth year of studying, I had the chance to join in on the studytrip to India in 2016. As you probably know, the studytrip requires you work a business case for 100 hours to - partly - pay for the trip. My business case was at Eventix, back then a startup company in the ticketing industry. This came at a great time because I wasn't really enjoying my studies at the time and some 'distraction' was very welcome.

After having 'served' maybe a third of the 100 hours I asked the owners something to the extent of: "The current platform is not future-proof and generally just shit, how about starting over?" Surprisingly, they said yes! So then I basically paused studying and went all-in on the new version of the platform. As you can well imagine, the business case got completed quite quickly and then I transitioned into an employee of the company.

“ Being able to stand at the forefront of everything is immensely satisfying once things start to come together ”

Eventix is a 'company' for sure nowadays. 70 people, offices in multiple countries, and everything else you'd expect from a 'company'. Back then, however, it was just four people, me included, and obviously the same level of service needed to be provided as is today. Startup life is quite weird, you have front row seats to all ups and downs, and things change more often than they stay the same. If you are up for it though I can greatly recommend it. Being able to stand at the forefront of everything is immensely satisfying once things start to come together. You are very independent, your work has huge impact, and you will definitely quickly gain a lot of experience. The only drawback of this independence is that there is no safety net, no-one to blame for your mistakes, and you will be called when stuff breaks regardless of the time.

In those days my task (titles didn't exist, nor matter) was to design and create the back-end, get it deployed, and keep it operational. Luckily, I had quite some experiences with these things even though there was nothing in my formal education preparing me for it. Private projects, previous sysadmin jobs, a bit of self-employed work, and most importantly, committee work at GEWIS helped immensely. If you are looking to get some technical dev-ops-y expertise joining technical committees like CBC, ABC, and GEHACK are a great way of getting started.

In the span of about 9 months we managed to get the rewrite into a state that the first customer could use it. As you might expect this first release did not go smoothly. Because of the speed required, and the level of trust in teammates' work, we never ran a full end-to-end test. The customer announced when their ticket sales would start and the morning of, I added some 'sensible' rate limits. These turned out to be way too strict and managed to take the entire platform down in a few seconds; oopsie. Again, no-one to blame other than yourself.

Over the years I accumulated more and more of these war stories. Luckily enough there are more stories with happy rather than sad endings. If you come find me in person, I'm more than happy to tell you a few; though the density of these gets sparser over time. Some might find it a tad sad, but I'm happy those days are over. The allure of high stress situations and getting called at odd hours to fix things wanes quickly. Though the positives, like the feeling of seeing God knows how many thousands of people that used 'your' software enjoy themselves never gets old.

Over the years, the company grew, and with these new opportunities presented themselves. Many things changed for the better, it feels like Eventix is finally becoming a proper company. Gone are the days of just winging it and seeing what happens. Nothing makes me feel more like an adult than statements like: "Maybe HR should be involved with this." Even though we started out with approximately 2.5 developers, the team had to grow, and roles had to specialize even more. Nowadays, tech-wise, I focus more on design and futureproof-ness than writing much code. The code I do write is more focused on enabling colleagues, than something that customers will interact with.



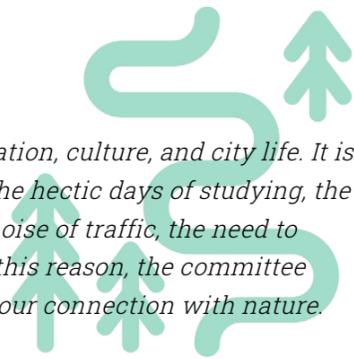
The team has grown from the few people to about 13 now. Given that my boss was doing most of the management, and we needed him for different things, I started to take on some of his management tasks. So next to writing some code I'm also responsible for making sure the entire development team keeps running smoothly, has interesting and achievable projects, and a framework for their own development. Working at Eventix is still fun and challenging. I once said: "... we will be done by 2019". But 5-ish years later there is still much work to do.

Even though it has been years since I graduated and even longer since I started working full-time I can still be found at GEWIS sometimes, mainly to support and/or annoy GEHACK. If you think the story I told you sounds interesting, come have a chat.

“ Nothing makes me feel more like an adult than statements like: "Maybe HR should be involved with this." ”



GEDWAAL



Life in Eindhoven is a vibrant whirlwind of innovation, culture, and city life. It is of course also a great place to study, Yet amidst the hectic days of studying, the crowded places in the city centre and the constant noise of traffic, the need to reconnect with nature becomes more essential. For this reason, the committee GEDWAAL organises a relaxing winter hike to find your connection with nature.

TEXT Lucas van Honk

We are GEDWAAL, the committee responsible for organising the annual hiking weekend (and hopefully more activities in the future). We share a passion for exploring nature on foot, whether you call it hiking, walking, or strolling. On top of these weekend, we also organise fun activities after the hike. GEDWAAL has been organising these weekend since 2014, although not in its current form. Before the committee GEDWAAL was a thing, every year there would be a new committee formed to organise this weekend. After proving that these weekends could be successful within the association and having organised several weekends, it was decided that GEDWAAL would become a continuous committee.

Over the years, GEDWAAL has explored some of the most beautiful natural landscapes in the Netherlands. Two years ago, we visited the Veluwe, where we walked through vast heather fields and forested areas, ending in the city of Arnhem. Last year, we explored the Mokerheide, a stunning area near Nijmegen.



The weekends usually start at Eindhoven central station, where we take a train to a station close to the final destination. There we start the hike and walk to the final destination, making sure that the route is mostly through the nature. At the final destination, we start cooking such that we have a lovely dinner together. This dinner consists of the typical classic dish of 'stampot', consisting of mashed potatoes and vegetables. After dinner, we also organise an evening activity such as an escape room, pub quiz or laser tag. Later in the evening, everyone can do whatever they like. For example, people sing karaoke, play games and dance to music, while others choose to get some well needed rest. The next day we have breakfast together and have some kind of Sunday morning/afternoon activity. Last year for example we visited the castle of Wijchen. To end the weekend we take the train back Eindhoven, closing a fun and relaxing weekend.

After this article is published, the next edition of GEDWAAL winter hike probably has already taken place (*editor's note: Nope, the cyber-attack happened instead*). But rest assured, the committee has more exciting plans for the future!

Infimum: A strange or funny quotation from a teacher, a student or faculty member. Here you can find infima sent to the Supremum committee via inf.gewis.nl.

Wietske: "Mijn kwartjes zijn alleen niet even groot."

Jelte: "Heb ik ook wel eens last van."

Patrick de receptionist over de intercom: "Het gebouw is nu gesloten, voor elke 5 minuten dat ik hier nog moet zitten wil ik één bier."

Max Oer: "I thought 10 divided by 2 was 4."

Thijs L. over de triathlon: "Het is maar 4km zwemmen, dat kan letterlijk elke... vis."

Ece E.: "When was 9-11?"

Noa: "Dat is de Terminator!"

Noa: "I'm back!"

Arend: "Een knak is een soort kindvriendelijke sigaret"

Jasper B: "Dan offer ik me wel op! Ik kan alles door mijn strot krijgen"

Tessa: "I am very much against democracy"

Aimee: "Victor can you look up bier on Google for me?"

Jasper B (in de trein): "Ik ben aan het lezen over treinen."

Tessa: "Jelte weet jij hoe externals zich kunnen uitschrijven voor lunchlezingen?"

Jelte: "De knop unsubscribe."

Wouter v. H.: "In /bin/bash doe je vaker de cringe dingen."

Sanne d.W.: "Die bomen moeten gekapt worden, die vissen moeten gevangen worden."

Celine d. J. has just switched to CSE: "Is there a way to get this software into dark mode?"

Dhr. Peters: "Je moet een gegeven paard niet in de free for all leggen."

Lucy d.G.: "Ik heb een nieuwe kerstrui sinds de zomer."

Ruben W: "Kunnen we mijn kater git reverten?"

Jelte d. K.: "Ciska's noten zijn een beetje taai"

Ruben Wo: "I'm not gonna pay extra, they can suck my nuts"

The board room: "I want to suck your nuts!"

Koen B: "Aah lekker, wataah"

Bartjan H.: "Wat 'vo dat het GEWIS lied 41 regels lang is"

Tessa V.: "Dat is niet waar! Mijn deeeeeeeeeeeeeeee is zo lang dat het twee regels toevoegt!"

Ciska d.G.: "We are with 6 people, we can rob a bank!"

...

Ciska d.G.: "Why can't we do it in America? Oh we probably get shot..."

Noël: "Volgens mij mag ik nog niet rijden"

Lucy: "Heb jij een rijbewijs?"

Noël: "Nee."

Robin v D.: "Creamer? I hardly know her!"

Ollie: "Défi is eigenlijk I.V.V, maar dan rechts."

Celine, over een spin: "Hij is echt slecht in overleven."

Stijn: "Wie is Roobert van der Drift?"



MEMBER

STUDYING ABROAD

When looking into a fractal, especially after eating a certain kind of brownie, one begins to think deeply about certain topics: “What is the meaning of life?”, “I wonder if the auditorium locks all its doors at night?”, and “Where did it all begin?” For fractals are infinite, but we humans are not, and our lives have very definitive sections and beginnings. I certainly know exactly when the Eindhoven section of my life began.

TEXT Rohit Binu

“Eindhoven,” I thought to myself, “seems interesting. Let me keep this as my second choice after the glorious TU Delft,” I thought as I scrolled through “Top 10 Universities in the Netherlands for Bachelors.’ After that, I walked my dog and didn’t think too much of it. Unfortunately (at the time), I did not get into TU Delft and had to make do with the TU/e. Fast forward a few months, and I am leaving my home of 17 years, bags packed, and looking forward to Eindhoven.

The bike roads were the first feature of Eindhoven that really caught my attention. After my first journey through the city on my bike, I was absolutely dumbfounded at how well the biking infrastructure was organized! To this date, I am still constantly impressed by it. Biking 16 kilometers a day would have been a nightmare in almost any other country, but in the Netherlands it is a walk (or more accurately a bike ride) in the park. (On a recent bike trip, I found out that certain bike roads in Eindhoven have red streetlights, so the road is more visible at night, something that had been a pain for the past 20 kilometers of almost pitch-black road, but I digress.)

Fast forward a few more months (this phrase is very useful), and I am at the Open Day for Computer Science. I meet some people, some of whom I am still in contact with today, and I am introduced to a pillar of Dutch culture: the food.

Hubble had graciously offered free chicken curry and rice to all the attendees of the Open Day. I was still fresh off the boat from India, and the words “chicken curry” had me salivating. However, the second I put the first spoonful in my mouth, I discovered the harsh reality of life in the Netherlands.

The VOC conquered half the world for spices, but somehow none of it made its way to their food. And food is something very close to my heart, especially free or cheap food. I quickly learnt that nothing in this university matches the joy of free food. This has led to me being present at almost every single one of GEWIS’s lunch lectures and accumulating 65 MyFuture points at the moment at which I write this.

Unfortunately, lunch lectures only occur every Tuesday, so I needed to find other sources of nutrition on campus. When I was a first-year, my go-to option was the typical Hubble and Hizmet combo. However, due to inflation, I’ve switched to the more affordable (and arguably tastier) alternative lifestyle of the SSC cafe and Al Balon combo. (With a (un)-healthy dose of frikandelbroodjes to balance everything out.)

“ Let me keep this [TU/e] as my second choice after the glorious TU Delft ”

But enough about food—there are, of course, other things to life. University gave me the chance to meet people from all walks of life, and making friends was, at least for me, much easier than it had been in high school, due to associations such as GEWIS organizing fun activities, getting lost in Atlas together while looking for that one room (there are rooms behind the lifts????), and, of course, hypothesizing over philosophical questions after baking brownies. (We decided on the answers being nothing, 42, [REDACTED], and Lelystad).

At first, I was a bit skeptical about people’s claims that university creates memories that last a lifetime, but after climbing down Vertigo in a Spiderman costume, I can confidently say that they were absolutely right.

Unfortunately, like all good things in life, this too had to come to an end. After 3 years of pain, sacrifice and way too many frikandelbroodjes, my bachelor draws to an end, and as I finish my bachelor’s degree, I step into a new phase with a mix of nostalgia and excitement, ready to take a short break from studies and explore the how to apply the things learnt over the past 3 years in the real world.”

Danky well,
fijne dag,
houdoe!





FYC 25-2 ICEBUG

THE CHILLING TRUTH ABOUT FRACTAL ICE

Ever heard of fractals? They are those endlessly repeating patterns that show up in everything from snowflakes to cauliflower. But did you know there is a secret branch of science dedicated to fractals in ice? No? That may be due to Big Water's rigorous efforts to prevent this information from reaching the masses. But stick around, and let us blow your mind with the facts.

TEXT FYC 25-2 Icebug

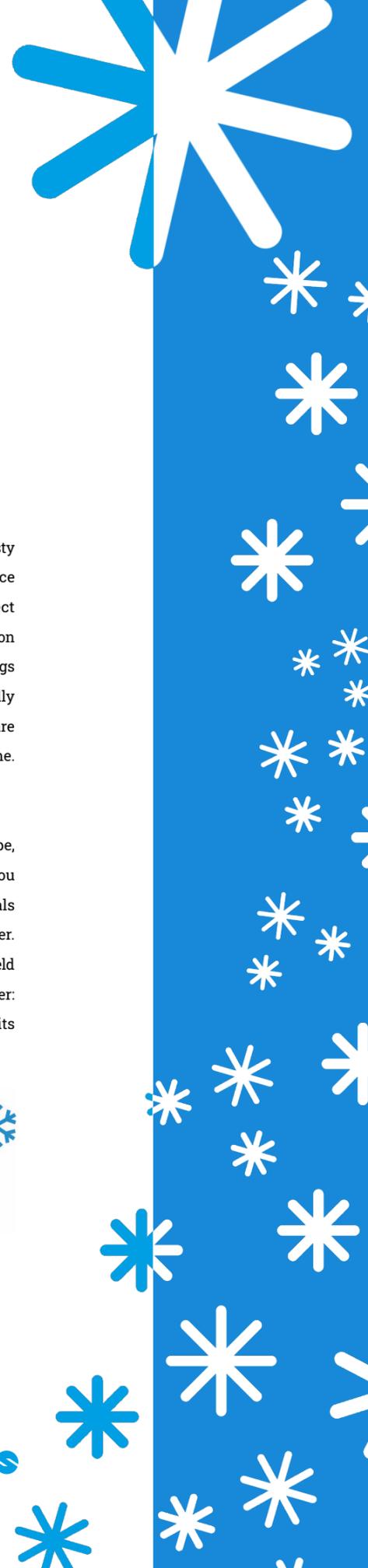
First, let's talk about fractal ice dynamics—a phenomenon scientists accidentally discovered while they, in collaboration with psychology researchers, conducted therapy with snowflakes as a joke. According to the leading Scientology researchers, ice fractals are formed when snowflakes have an existential crisis about their uniqueness. Each flake starts copying itself repeatedly, creating a cascade of mini-snowflake clones. This is why snow sometimes feels “extra snowy.” It is not just snow; it is a fractal invasion.

Now, if you have ever slipped on an icy sidewalk, congratulations! You have interacted with what we in the field call FOSS (Fractalèsque Organization for Slippery Surfaces). This happens when ice layers organize themselves into a perfect chaos of slippery surfaces. Each layer reflects a fractal pattern so intricate it rivals your worst life decisions. Scientists theorize this as ice's way of reminding humans who's boss.

But let's dig deeper. Have you ever wondered why ice cubes from your freezer crack when you add water? It is definitely not thermal shock. It is because of fractal resonance. When water freezes, it “remembers” the fractals of its liquid state. When warm water touches the frozen cube, the fractals resonate and cause the ice to crack. This is the same principle behind glass breaking when an opera singer hits a high note. Except it is way cooler because, you know, ice.

The phenomenon does not stop there. In ancient, frosty caves, independent explorers have found fractal ice carvings—ice crystals that grow in such perfect symmetry they resemble alien hieroglyphs. A common theory among glacial historians is that these carvings are messages left by Arctic penguins who are actually way smarter than they let on. Others think they are the work of bored polar bears with too much free time. Either way, it is a chilling mystery.

In conclusion, fractal ice science is a slippery slope, literally and figuratively. While Big Water wants you to dismiss it as nonsense, we know the truth: fractals are everywhere, even in the icy depths of your freezer. So next time when you are staring at a frosty windshield or sliding ungracefully on a sidewalk, just remember: it's not just ice. It's fractal ice, laughing at you from its infinite patterns.



WHY BRONZE IS BETTER THAN SILVER AND GOLD

For the past few years, every board has chosen its own board color. From purple to blue to orange, every color has been chosen at least once already. While it is of course possible to pick a different shade of the same color, we wanted to stand out a bit more. This is why we chose a metal color, namely bronze!

TEXT Tessa Verheul and Jelte de Kock

The only thing about metal colors is that there seems to be a natural hierarchy between them. Namely: gold, silver, and then bronze. So, while people seem to appreciate our creativity, they also often ask why we did not pick silver or even gold, because those are the “better” colors. But here we kindly disagree, we believe that bronze has much more to offer and deserves a higher place in the hierarchy. In this article, we will explain why.

In sports the first place is offered a golden medal, the second place a silver medal, and the third place a bronze medal. But a bronze medal has its advantages. A study from 2018 looked at the lifespan of all medalist categories by tracking the average longevity of those representing the U.S. in the Olympic Games from 1904 to 1936. Here they found out that the lowest average lifespan belonged to athletes whose best performance was a silver medal, with an average age of 72.

“ Gold medalists had an average lifespan of 74 and the highest average lifespan belonged to bronze medalists, who lived up to 78 ”

The research also gave an explanation for this outcome, namely that “Dissatisfactory competition outcomes may adversely affect health.” Silver medalists tend to compare themselves with the gold medalists, reflecting on their mistakes and thinking how they almost have a gold medal, while bronze medalists tend to compare themselves to all the athletes who did not even make it to the podium. Making them grateful, knowing how close they got to not receiving a medal. Downward social comparison makes us much happier than upward social comparison, this can even influence our health.

Not only are bronze medals better for the athletes, but they should also be the most exciting for the viewers of the competition. Often there is a clear prediction of who is going to get a podium spot, which takes away part of the excitement of the game. The first- and

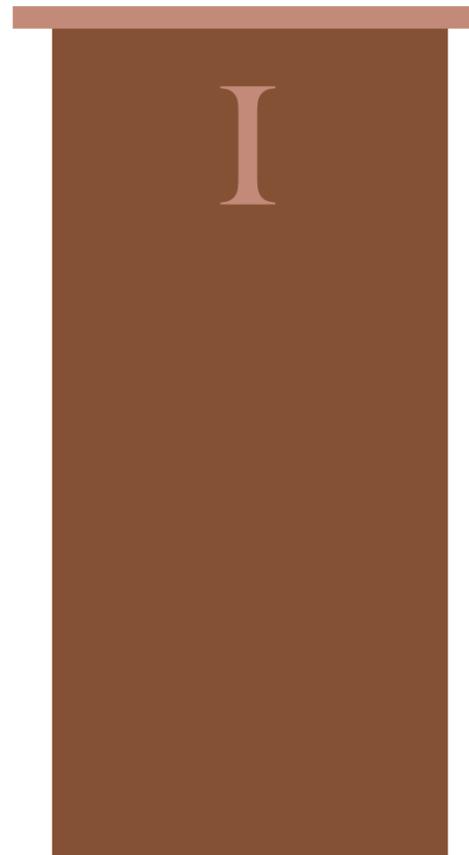
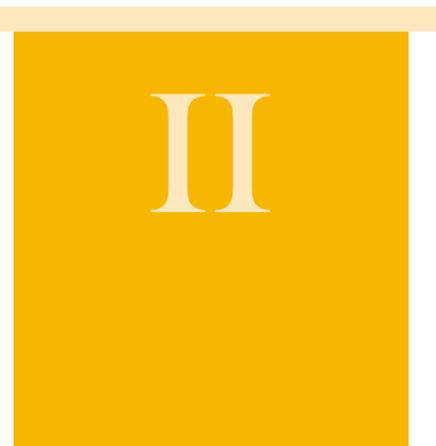
second-spot are often not a surprise, but the third-place spot is the likeliest to go to someone who might not have expected to place at all. As a result, the bronze medal is more often given to the underdog in a competition and study shows that people tend to root for the underdog. Most likely because their unexpected success is hope and inspiration for us to do the same. Bronze, silver and gold are not just known as prizes in sports, they have been around for a long time already!

For example, in ancient Greece bronze was used alongside marble in the statues that people built. Not only was there a high demand for bronze to be used in statues at that time, but it was also used a lot in other things. In war for example. People would make their swords out of bronze, because of its high durability and strength, instead of silver or gold, as those swords would break much quicker. This is also the reason that there are not a lot of bronze statues remaining from ancient times, as people thought bronze was so valuable, and of need for them, that they would steal and remelt the statues into other things.

Even now bronze is still a metal that people choose a lot instead of silver and even gold. Because of its high durability, and corrosion resistance, it is used a lot in industrial applications. It is for example used in bearings, gears and bushings, because of its ability to withstand friction and wear. It is also used in marine environments because of its high resistance to corrosion making it the perfect material for ship fittings, propellers and underwater instalments.

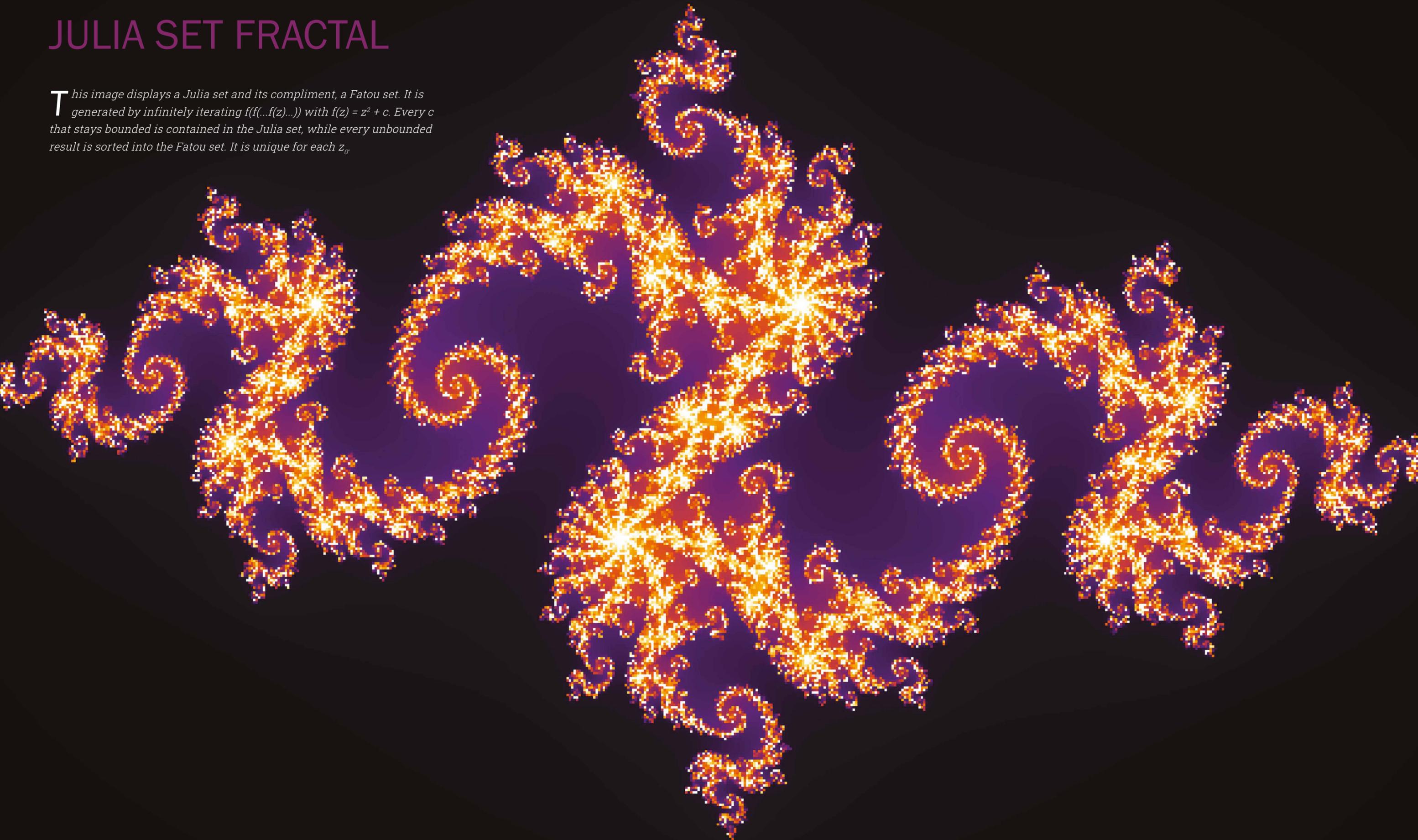
Not only is bronze used a lot more than gold and silver because of its high durability and better qualities, but it is also cheaper. This is because bronze is an alloy made from copper and tin. These two elements are a lot more abundant in the earth than gold and silver are, and are therefore cheaper to get. And besides that, mining for gold and silver can be highly destructive to the environment, involving toxic chemicals like cyanide and mercury. Bronze can often be produced with fewer harmful impacts, especially if recycled metals are used. This means that if you had to choose a metal out of gold, silver and bronze, for its practical use, it is best to choose bronze as this will give you the most worth out of your money.

So as became clear from this article, bronze is better than gold and silver in many ways. Not only are bronze medals better for athletes that win them, they are also more fun for the competition. And next to that, bronze is the better metal, both in use for mechanical things, but also for art. All these reasons make it very clear why we, the 43rd board, would choose the color bronze as our board color, and not gold or silver. So now you know why we think bronze is the best!



JULIA SET FRACTAL

This image displays a Julia set and its complement, a Fatou set. It is generated by infinitely iterating $f(f(\dots f(z)\dots))$ with $f(z) = z^2 + c$. Every c that stays bounded is contained in the Julia set, while every unbounded result is sorted into the Fatou set. It is unique for each z_c .



*Infimum: A strange or funny quotation from a teacher, a student or faculty member.
Here you can find infima sent to the Supremum committee via inf.gewis.nl.*

Samuel O.: "ChatGPT is gewoon mijn version control"

Ruben: "Die fucking piemel zit echt in de weg, ik kan gewoon de bar niet zien"

Leon V.: "Eigenlijk is bier gewoon thee"

...

Leon V.: "Maar dan wel oude thee"

Ruben W.: "I am appalled"

Jens K.: "Hi appalled"

Ece E.: "Who is Paul?"

Elwin: "Hij past er helemaal niet in"

Jelte de K.: "Dat is inderdaad wel, dat je soms écht even goed moet rachen voordat het pijn doet."

Victor K.: "Wat heb jij voor ontbijt?"

Tessa V.: "Avondeten."

Noel v.d.V.: "Trading is een soort van dropshipping voor gevorderden. Als je niet de mavo hebt gedaan, maar op de havo hebt gezeten, ga je dit maar doen. Dan is dit je stappenplan."

Robin v. D.: "Ik voel me wel een van de meest capabele mensen bij het WISO. (...) maar dat komt misschien ook wel omdat de rest heel dom is."

Victor: "Wat is een driehoek?"

Ruben Wo.: "Bestuur, wanneer standing desks?"

Jelte de K.: "Ga gewoon staan"

Robin v. D.: "Ik ben wel de cuck van de CBC."

Sanne de W.: "Ja het is een soort kruising van de Etos en een snoepwinkel... Maar dan met condoms."

Daan V.: "Het voelt alsof mijn pols vast zit aan een vibrator vandaag."

Robin v.D.: "Moet ik de afwaskar voor je doen? Je loopt mank."

Tessa V.: "Nee hoor, het is een soort rollator."

Ruben W.: "Calculate out your winst."

Jelte d. K.: "Ik denk dat mijn achternaam ooit zonder c werd gespeld.' Ciska d. G.: 'de Oock?"

Sven na zijn tentamen: "Het waren open vragen, maar ze waren nog meer open"

Samuel O.: "Is het tentamenweek?"

Ruben W.: "Ja, daarom mogen we al om 2 uur drinken"

Samuel O.: "NEEEEE!!! M'N PRODUCTIVITEIT!!! M'N AFSTUDEREN!!!"

Samuel over alle jetbrains pins op zijn tas

Samuel: "Ik heb alle infinity stones, nu hoef ik niet meer te douchen."

Henkemans: "Praeses van Dijke klinkt echt als een praeses van de Lid!"

Saelia H.v.P.: "Jouw stoel? Mijn stoel!"

Ciska de G.: "Ik ben van ATHENA, het enige wat ik doe is cocktails drinken en toetjes eten!"

Inge: "I was very carefully explaining things to you and all you could think about was penises"

Samuel: "Daar heb je gewoon voor betaald, maar dan andersom!"

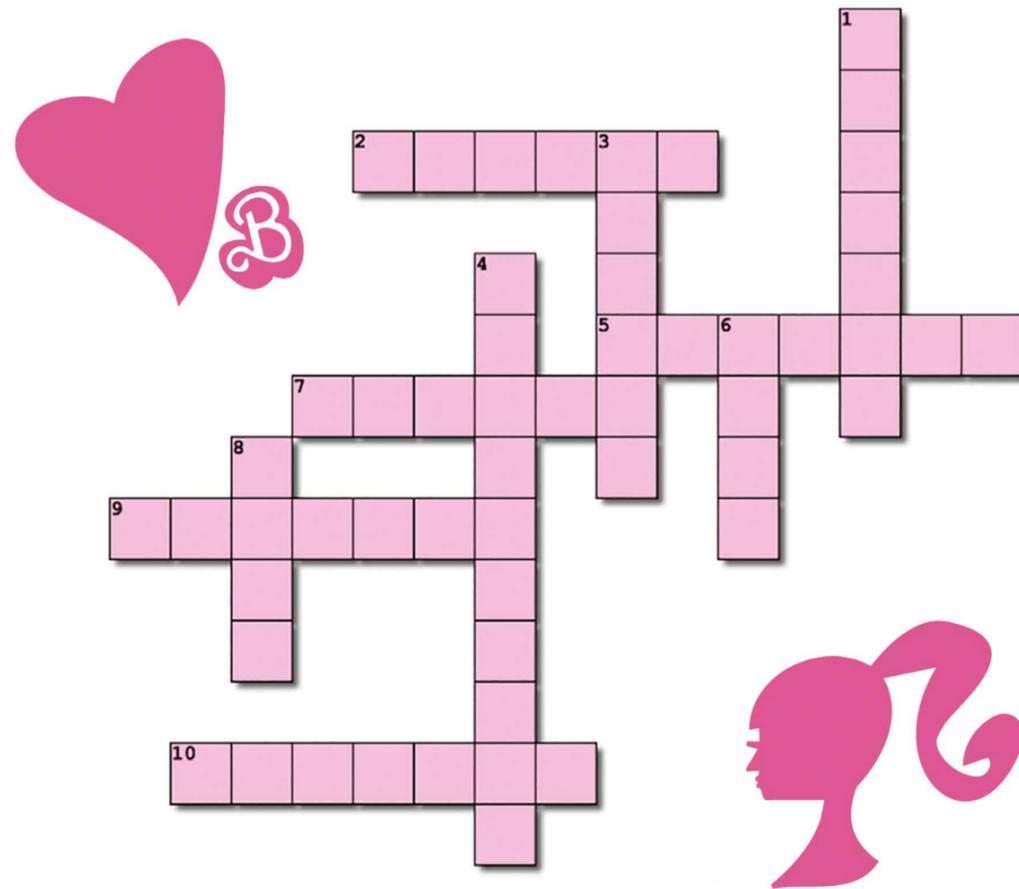


FYC 25-3 BARBI/E

BARBI/E CROSSWORD PUZZLE

Hey there, we're the most **fabulous, fun, and totally iconic** FYC from GEWIS, **FYC Barbi/e!** 
But enough about us – grab your glitter pens and get ready to solve this **glam-packed crossword puzzle!** It's all about **Barbie**, her world, and a sprinkle of FYC magic! 

TEXT FYC 25-3 Barbi/e



Across

- 2. Barbie's beach town
- 5. Barbie's real name
- 7. Company that created Barbie
- 9. Barbie's oldest sister
- 10. Barbie's youngest sister

Down

- 1. The Barbie starring in A Mermaid Tale
- 3. Fluffy friend from Fairytopia
- 4. First Barbie movie
- 6. Inventor of Barbie
- 8. Number of people in FYC Barbi/e

IN THE SPOTLIGHT

Hello everyone! I am Jan and there is a strictly positive probability that you may have seen me existing around GEWIS, sitting in the lounge, just walking around, or standing in the picture to the side of this page, all while wondering who I am. Hence, as a new active member I am happy to be able to introduce myself to you all.

TEXT Jan Bulthuis

THE REST OF THE WORDS

After being born in Edinburgh, I promptly left Scotland and its rainy weather for the famously sunny and totally not at all rainy Netherlands. Here I spent my childhood growing up in the beautiful Apeldoorn. While mostly known for Centraal Beheer and its "even Apeldoorn bellen" slogan, Apeldoorn is also known for other things such as the Apenheul and Teuge International Airport. Growing up in Apeldoorn is not something I did on my own, that is where my little sister comes in. We are very similar to each other in one aspect, we are both not very similar to the other.

But enough about other surrounding circumstances, this introduction is about me and the journey I made between being born and deciding to become an active member at GEWIS. For a long time, I have known that I was going to study computer science, but where did this desire initially come from? For as long as I can remember I have been fascinated with computers, this started at around age 7 when my favorite computer game was the "word typing game", where I would mash the keyboard with notepad open and would then look to see if the mess of letters on the screen contained any words I could recognize. Truly thrilling gameplay.

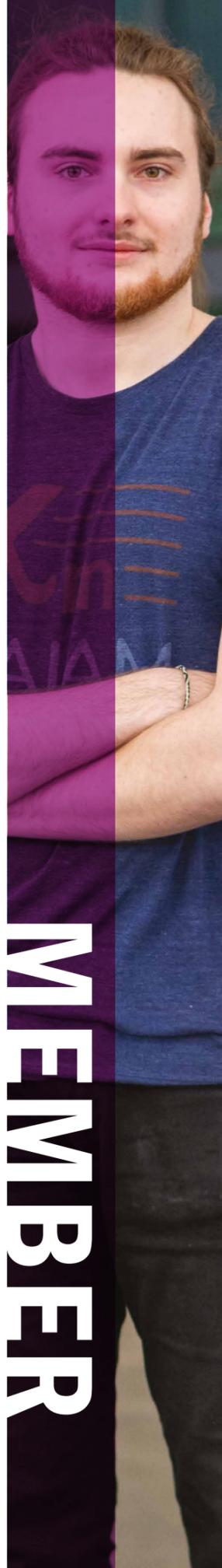
Somewhere in the following years I obtained two things that really got me hooked on the drug that is called computer science, a Minecraft account and a Lego Mindstorms set. Whereas Minecraft was mostly a slideshow until I built my own pc a few years later, Mindstorms, which is Lego's programmable robot set, was supremely addictive to my flexible, malleable brain. I must have spent weeks, probably even months,

building line-following robots, color sorting robots and at one point even a pinball machine. In hindsight, this is also almost certainly where my interest in following a master in Embedded Systems originated.

At this point I also got my own computer and was finally able to both play Minecraft at reasonable framerates and start really messing around with the computer itself. Many half working unfinished small websites have been written on that pc and many fond memories were made. Until the betrayal of '21, when I repurposed half of the components in that pc into a homelab, leaving its skeletal husk standing on my desk; a memorial to my first kill.

Then finally the time had come, I got to decide where I wanted to study computer science. I am no longer sure why I originally made the decision to go to the TU/e, but hindsight tells me that it was a good decision for me. As apart from meeting nice people and making good friends, I was also able to do some other fun things. Prime among these was being part of TU/ecomotive where I worked on the embedded systems in our car Eterna and doing a board year at SPV Blue. However, all of that has now been relegated to the past and I have embarked on a new adventure by joining the CBC, making me (for the first time in my four years of study) an active member at GEWIS.

While I have now joined the CBC, I am still getting familiar with everything in and around GEWIS, so, if you see me around, feel free to come up and say hi!



MEMBER



AUTOSTEREOGRAMS

Ever since my youth I've been obsessed with optical illusions. I suspect it started with a book we owned, called "Onmogelijke Figuren" (Impossible Figures), by Bruno Ernst. It's a book about those impossible triangles and such, you know the ones. They are objects that are impossible in 3D, but can be represented in 2D such that they seem real. Some years later I found another optical illusion that grabbed my attention, but this time an impossible 2D image that can show you a 3D one. Dear reader, welcome to the wonderful world of Autostereograms.

TEXT Arend Roijackers

According to a very reliable source: "An autostereogram is a two-dimensional (2D) image that can create the optical illusion of a three-dimensional (3D) scene". So you have a 2D image that looks like gibberish; do some weird eye straining and twitching as if performing an exorcism, and suddenly you see a 3D image.

"But how does this connect to fractals Arend?", you might wonder (well I really don't expect you to wonder but hey it looks nice in the story). Well, sorry to disappoint, but it does not really connect yet. That will come later.

An actual first question that might arise; but how do I do that? Well, here goes my botched way of explaining this (please do follow along for the full experience): Take your hands, and point your index finger up to the air, and hold them about 15 cm in front of your eyes, and about 15 centimeters between your eyes. If you are doing things well, you should be seeing two fingers (crazy right?).

Now look at a wall or anything behind your fingers. Now, you should be seeing four fingers (each finger split into two). Now if you move your fingers closer together or farther apart, that depends on how you are holding them, you can overlap your two fake fingers; making it such that you see three fingers (of which the middle one the most "clear")

This is essentially how you do the 'magic eye trick'; you look behind the image such that two halves of the image overlap and form a third, 3D image.

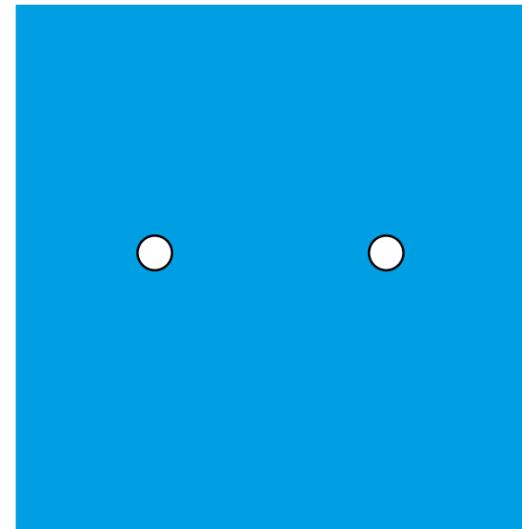
This does not yet explain how it works. To be completely fair, I would love to explain it in high detail, but 5 minutes of reading Wikipedia is about all the concentration my brain can muster on a Saturday night, so here goes my poor attempt:

Using the finger analogy again: Since you "see" the third finger when looking "behind" where your two fingers actually are, your brain thinks that the third finger is behind those two fingers. And with the fingers that doesn't really show, but if you do this trick on a flat plane, then depth is more obvious and you see depth on the 2D image. (please don't quote this, I'm relatively sure this is not correct but it gets the idea across)

So, all the blabla aside, time for the fun part; the part where you also learn how to do this! To the right you will find 3 images. The first one a full training picture, with only two dots. This should mimic the finger thing before, but then on a flat plane. So you want to overlap the dots to obtain a third dot.

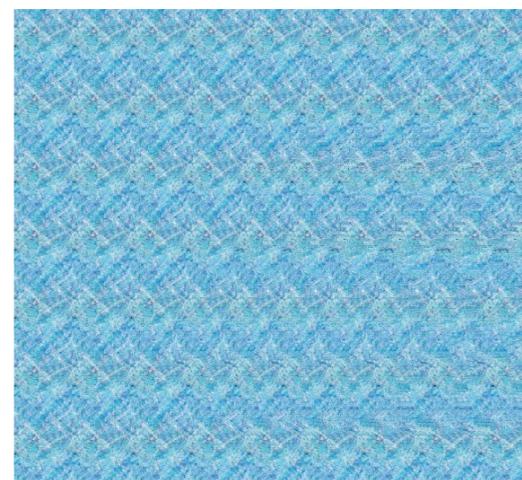
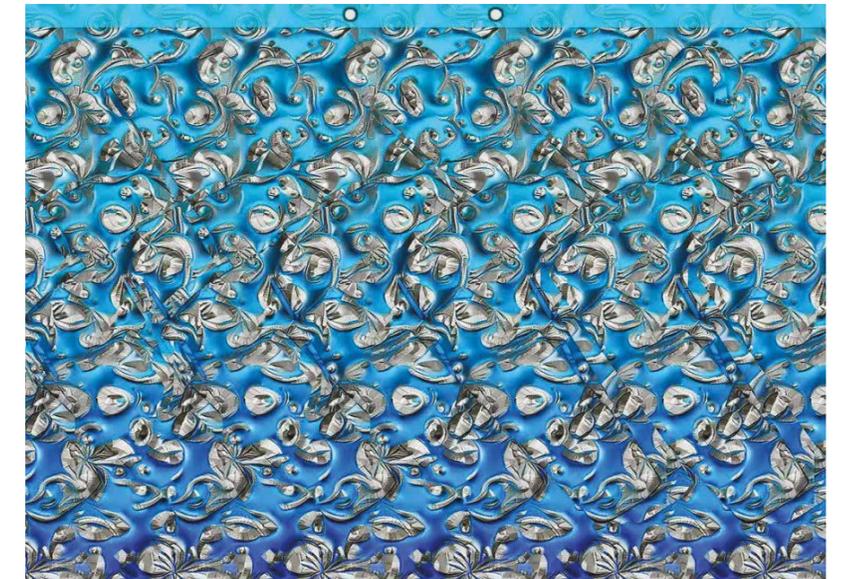
The second picture a more involved one, where there are still the training dots, but now also a full image to 'switch' to and experience the Autostereogram for real. And thirdly, finally, the connection to the theme of this supremum; Fractals. That one I will leave as an exercise to the reader.

Have fun!



Try to overlap the two dots, where in the end you should see 1 clear dot in the middle, and 2 vague dots to the side.

Now again try to overlap the dots, and then look at the rest of the picture to see something 3d appear!



Now for the final challenge, try to see the image without the practice dots, to see the theme appear right in front of your eyes.



COOKING WITH “IN VINO VERITAS”: GRAVLAX



At the start of the century the French cuisine was at its peak. Maintaining consistency above all and using exotic products from all over the world. Not only did this mean more importing costs for the restaurants it also meant that not everything was fresh produce. Surely this does not have to be the case, and you can find fresh food all around you if you search for it.

TEXT Sven Mokveld - I.V.V

This is the philosophy behind the culinary movement New Nordic Cuisine. It is the philosophy of cooking used in possibly the best restaurant of the last decade, Noma.

This cuisine was inspired by traditional Scandinavian cooking and takes inspiration of these traditional recipes to use local seafood, meats, vegetables and even gather plants from nature itself. This cuisine also meant to revive old Nordic cooking techniques to extract as much flavor from this natural produce.

For us at fraternity “In Vino Veritas” this sound like music in our ears. Not only can we make sure that you get to enjoy some culinary highlights, we can also do it for a student price. So, one of these techniques is salt curing. If applied to salmon with a mixture of salt and sugar, it is called a Gravlax. This comes from the old Northern Germanic word gräva, which meant ‘to dig’. During the Middle Ages, fisherman would salt their salmon and would cure it by burying it on the beach above the water line.

In modern times gräva means to cure, and Gravlax -from a culinary viewpoint- can be applied to any sort of fish. However, we wanted to innovate ourselves and applied this technique to venison, or better known as the meat of a deer. While traditional Gravlax is made with fresh herbs, we found that this would not fit in the style of Decadent Weekend, which is traditionally

hosted in the winter. Which is why we opted for a mixture of peppers and spices, and creating freshness not with herbs but with citrus fruits.

So, without further ado, let’s get into the recipe of the Gravlax and combine this with a recipe for a sweet tomato sirup and an umami rich mushroom puree for a perfect balance of all flavors on every bite.

We start with the deer Gravlax itself as this will have to cure for 6 to 8 hours. The following recipe is for 6 portions.

INDGREDIENTS FOR DEER GRAVLAX

- » 1 piece of 250 grams of deer filet **0**
- » 4 grams ginger powder
- » 16 grams 4 season peppers
- » 4 grams juniper berries
- » 4 grams star anise
- » 100 grams of fine salt
- » 100 grams of course sea salt
- » 100 grams of light brown caster sugar
- » 3 garlic cloves
- » 2 bay leaves
- » A couple of sprigs of thyme
- » 1 orange
- » 1 lime
- » 1 lemon
- » Unsalted butter

DEER GRAVLAX

STEP 1

Heat a bit of oil and butter in a non-stick pan, once the butter starts to brown add the meat to the pan. Sear each side of the deer filet for about 30 seconds per side. The important thing is that the meat gets a nice color but does not start to get cooked. After this set the filet aside to cool.

STEP 2

Get a bowl and add both the salt and the sugar. Coarsely chop the 3 garlic cloves and add to the bowl. Add the thyme, bay leaves and all the peppers and spices.

STEP 3

Grate the 3 citrus fruits and add the zest to the bowl.

STEP 4

Add the juices of half a lemon, half a lime and half an orange and mix it well.

STEP 5

Grab a pan or a container in which the filet just fits. Add a small bed of the salt mixture to the bottom and lay the filet on this.

STEP 6

Cover the filet completely with the salt mixture. **1**

STEP 7

Let it rest for 6 to 8 hours, remove the filet from the mixture and wash of any remaining salt on the filet.

STEP 8

Now it is ready to be served, a good way to cut it is like a sashimi piece.

The second part can be started immediately after you are done with the filet or you can wait a bit. The sirup will have to be put in the oven for 2 to 3 hours but as this dish is served cold you can put it in the fridge for whenever you are ready to serve. This recipe is for 10 portions.

INDGREDIENTS FOR SWEET TOMATO SIRUP

- » 75 grams of crystal sugar
- » 500 grams of Roma tomatoes
- » 500 ml of tomato juice
- » 5 ml white wine vinegar
- » 1 diced onion
- » 1 garlic clove
- » A couple of sprigs of thyme
- » 2 bay leaves

SWEET TOMATO SIRUP

STEP 1

In a cast iron pan or any oven proof pan, add the sugar and heat the pan until it is all a golden brown caramel. Deglaze the pan by adding the tomatoes and start to stir to mix the caramel with the tomatoes.

STEP 2

Add a bit of pepper and the onions and garlic. Wait until most of the liquid in the pan has evaporated and deglaze the pan once more with the white wine vinegar and the tomato juice. Mix it all together.

STEP 3

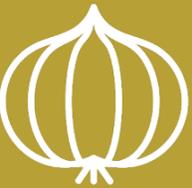
Put the pan in a preheated oven at 150 degrees Celsius for 2 to 3 hours depending on how syrupy you want it to be. Once out of the oven add salt, pepper and even some white wine vinegar to taste.

Now onto the mushroom puree. This recipe is for 6 portions.

INGREDIENTS FOR MUSHROOM PURÉE

- » 250 grams of chestnut mushroom
- » 2 garlic cloves
- » 2 shallots
- » 250 ml of heavy cream
- » Unsalted butter
- » 1 garlic clove
- » A couple of sprigs of thyme
- » 2 bay leaves





MUSHROOM PURÉE

STEP 1

Cut the mushrooms in 4 pieces. Add butter to a pan on medium heat and cook the mushrooms until they start to soften.

STEP 2

Deglaze the pan with the heavy cream and cook the mushrooms further until done.

STEP 3

Add the mushrooms to a blender or food processor with a little bit of the cooking juices.

STEP 4

Slowly add room temperature butter till your puree has the thickness that you desire.

STEP 5

Add salt and pepper to taste.

Lastly to add some more texture to the dish we add some small garnishes.

INGREDIENTS FOR GARNISHES

- » 50 grams radish mix
- » 10 ml of white wine vinegar
- » 125 grams cooked red beets
- » 100 grams mushroom mix
- » 50 grams of mayonnaise
- » Bunch of chives
- » Bunch of parsley

GARNISHES

STEP 1

Cut the radish in 4 pieces and add a bit of salt and white wine vinegar to taste.

STEP 2

Cut the red beets in coarse pieces and add salt and white wine vinegar to taste.

STEP 3

Heat a bit of oil in a non-stick pan on medium heat and cook the mushrooms until soft and browned and let them cool down.

STEP 4

Finely chop the chives and parsley and add to the mayonnaise until you have the desired herby taste. Now combine all parts on your plate and enjoy a perfectly balanced and delicious meal. We advise to combine this recipe with a beautiful cabernet sauvignon as this full-bodied wine goes perfectly together with a powerful meat like deer.



0

For a vegetarian variant you can replace the deer filet by an uncooked red beet.

1

If you want the filet a bit less salty or cannot cover the complete filet you can always add a bit of water to the mixture to create more of a marinade.



FYC 25-4 DRUNKHOVEN

GETTING TO KNOW DRUNKHOVEN

Have you experienced the joy of exploring places you've never been to before? Do you enjoy learning about different cultures? Are you eager to try different cuisines from around the world? This is what our FYC is all about! We are a group of Computer Science and Applied Mathematics students who enjoy traveling.

TEXT FYC 25-4 Drunkhoven

We have lost and gained a few members along the way, but the bonds amongst us are still strong and we always have a great time in our meetings, where we plan our upcoming activities and devour the snacks our amazing snack manager brings.

Before each of these meetings, it has become a custom for our chairman to hunt down the members of the committee that don't arrive on time (which happens almost every time) and for our snack manager to bring out the snacks, so that everyone can help themselves and not die of starvation during the meeting. Some of these snacks include self-made brownies that our snack manager made, self-made chocolate with a buttery filling made by our snack manager's mom, and various store-bought cookies.

If you ever wish to hang out with us you can usually find us in the GEWIS room during lunch breaks and participating in the GEWIS activities. For your convenience when trying to find us we will now proceed to give a brief introduction of our committee members and their roles.



Holaaaa, my name is Lucas. I'm the chair of this committee. I have the tendency to forget a lot, which is why usually I ask the day before if people want a meeting the next day, and then proceed to complain about the low attendance. If you would ever take over my headphones you'd probably hear a different genre every time because my music taste is, just like my thoughts, jumping around all the time. I like playing several instruments (mostly piano), reading, cooking and playing board games. I'm always up for a chat so don't hesitate to say hello if you see me :D

Hi! I'm Natalia, the snack manager of Drunkhoven, so it is my task to always have delicious snacks for our members during the meetings. I enjoy handcrafts, baking and aerial sports, which is why I am a member of the sport association SPV BLUE and of the fiber arts community Stitch. You can usually find me in the GEWIS room at lunch time. Feel free to say hi.

Hiii I'm Andrada, I deeply dislike self-introductions, and I am (allegedly) the secretary of Drunkhoven. Unfortunately sleeping and procrastination don't really count as hobbies, so let's just say I'm an artsy kid (drawing, painting, fashioning, photographing, DIY-ing, you name it). Most of the time I'm with my head in the clouds and listening to music - today's recommendations are 'Mother' by Danzig and 'Roxanne' by The Police. I've been told I have a resting bitch face so if you ever see me like that, just ignore my facial expression, I promise I'm friendly and won't bite.

Hiii I'm Iris, and I think I'm the self-appointed second secretary of our FYC? Whenever Andrada is still sleeping I take the minutes and I always eat the snacks our amazing snack master brings. I like being active, reading and having some (probably a lot more than some) drinks with my friends. I'm also part of a hockey team at Don Quishoot and see them often. I like yapping -a lot- so whenever I'm studying I restrict myself to the parts of the library where I'm not allowed to talk. If you're ever looking for me (probably FYC related because of my very important tasks) just look for the tall Dutch girl and you'll have a 99% chance it's me :)

Aloha dear GEWIS members, my name is Austėja (Austėja is pronounced as out just with s instead of t, and -ėja part is like Leia, so like Ousteia). As I do not have any special talent or ability that could help me reveal my role in this committee, I am "roleless" (have no role). However, if there is a job that any member of my fabulous committee can't take, I come to the rescue as their internal slave "happy" to take the job. I come from a far far land called Lithuania (no, not Latvia), so my taste in food may differ. The Dutch weather doesn't scare me though. Just so you know, if you offer me free food (or anything that is free), I will take it without any hesitation whatsoever, even if you were trying to be nice.

Ahoj, I am Matěj! "Ahoj" means "Hi" in Czech, which is, surprisingly, also my nationality. I am the official treasurer of our FYC and indeed I am the very person who coined the name of this beautiful FYC. Apart from mathematics and spending hours on writing a single proof for homework, my main interests are playing guitar with my small band or reading books. Some more facts: Neuron is better than any other building on the campus, I am sorry if you disagree. Also, as much as I cherish Eindhoven and the Netherlands, Dutch food is something that should not be allowed to be called "food".

Hi I'm Lars, in high school I used to introduce myself as the guy with long hair, but I noticed that's not specific enough anymore so you'll have to guess which one is me. My role within the FYC is Head of Public Relations, but generally it's just the stuff the other members couldn't be bothered doing. I also like making music. I primarily play piano but I'm also very mediocre at a lot of other instruments. My favorite artists are currently Jacob Collier, Sleep token and Pink Floyd. Even though I usually make a terrible first impression, feel free to come up to me to say hi :)

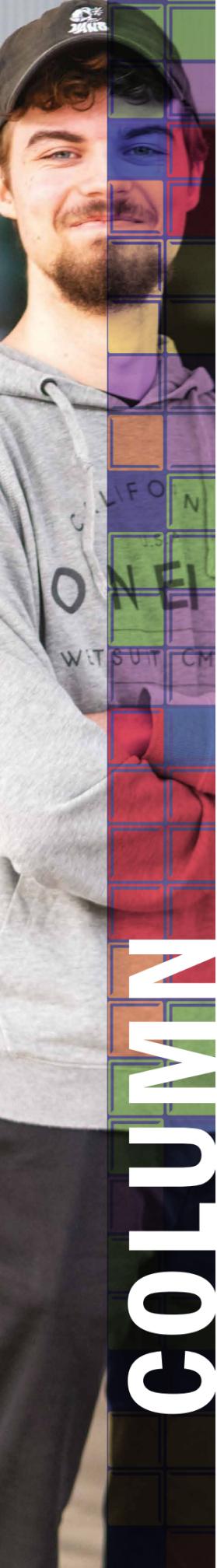
As was already mentioned we are an FYC about traveling. Obviously, when you travel to lots of places, you will eventually end up in countries where you don't speak the language. sometimes this will be fine, however in some places not everyone will speak a language that you do. This is why we use Duolingo. Duolingo will teach us all the essentials to learning a new language so that we can travel there. For example: "Excuse me, I am an apple" -the Dutch course on Duolingo.

We even tried to come into contact with Duolingo on several occasions, but I'm afraid we have outgrown them (as you can see by our Instagram followers) and they are now too scared to reply. HOWEVER, we were proudly mentioned in a story on the German Duolingo Instagram account, when we did our lessons during the Sinterklaas social drink.

We are currently busy discussing several activities so be sure to regularly check the event calendar of GEWIS!

If you would like to be kept up to date with our activities make sure to follow our Instagram @ [fyc.drunkhoven](https://www.instagram.com/fyc.drunkhoven) and if you have any questions feel free to contact us by email at fyc25-4@gewis.nl.





TETRIS

It is safe to say that most of our generation has heard of the game Tetris. A simple game that has been out for decades, yet is still played to this day. You may also have heard of the news article about a kid named Willis, also called "Blue Scuti". He was the first player in NES Tetris to "beat the game", after which a Sky News reporter advised him to touch some grass. Although I think that would be great to advice to some people (myself), she missed a bit of the big picture. As an enthusiastic Classic Tetris World Championship (CTWC) watcher for around 8 years, I would like to give you some insight into Tetris and what the world championship is. Bear with me on this journey and don't be scared when I sound like a lunatic who is a bit too obsessed with Tetris (although it is true).

TEXT Wessel de Jongh

To set the record straight, we are talking about just one version of Tetris and that is Tetris for the NES which came out in 1989. Although there are many releases of the game, this one is the only one used at the CTWC. I will quickly introduce one game mechanic, levels, but on a higher level as I think everyone knows the basics. In beginning things start slow, level 1-19 is doable (for a pro). After level 19 it gets a bit faster and after level 29 kill screen comes. This is where the pieces got no chill left and just end your run, because of how fast the tetraminoes fall. At least that was true for most of the CTWC history.

In the start of the tournament's history one player, Jonas Neubauer, was quite good. With that I mean he dominated in every way he could. He won a whole 7 times from 2010 to 2017 (except for 2014, which was won by Harry Hong). He was just goated with the sauce, averaging around 500.000 – 900.000 points per game. He played like any other person, with two hands holding the controller touching the buttons with his thumbs (DAS). Although you may think that is the only way to play the game, you couldn't be more wrong. Spoiler: feet were eventually involved for playing with the controller.

The goat Jonas would however be demoted to second place by Joseph Saelee, who is a hypertapper. Hypertapping is another playstyle that was used by a few players already, but never saw the top step. Joseph Saelee however showed the potential of hypertapping and also (most importantly) made Tetris get more attention and ultimately attracted a lot of new players. Tetris was quickly dominated by young players who were almost all under 20 years old. With this came a lot of improvement and a brand-new playstyle. Rolling was invented partly/mostly by a championship competitor called cheeZ. Now he played like no one had ever seen before, with his feet. Don't think he used his toes to press buttons, instead he used his foot to support the controller and "rolled" with his finger over the back of the controller. His thumb on the button would make sure he pressed the buttons, as his "rolling" fingers would push the controller into his thumb making rapid taps that would give him an advantage.

“ Spoiler: feet were eventually involved for playing with the controller ”

After this new technique was introduced, the Tetris community went ham. In a few years they went from just trying to reach kill screen, to straight up going along that speed like it was nothing. A steady 600,000 would get you in the finals in the early stages. From 2021 onward it wasn't crazy anymore to just go above 1.5 million. There was literally no limit to the game anymore and this is where the talk of crashing or "beating" the game began to start. A few people already knew that it was in the game, but never was it thought to be humanly possible. Of course, this is where Blue Scuti comes into play. A lot of Tetris players were hunting for the golden achievement of beating the game for the first time. As a dedication to his father that had sadly passed away a week before, he got the crazy achievement of getting the game to crash, something that a few years back was believed to be impossible.

This moment was not only making headlines, but was one of the greatest moments in the Tetris community and a historic moment for many (including myself). Although I have talked a lot about Tetris in this article, there is still so much I haven't talked about. It may sound like a simple game, but I haven't explained: delayed auto shift, color glitches, droughts, piece dependencies, burning, playing aggressive, max out, tug in.... I think you get the point. I highly recommend watching a finals match of the CTWC and right after booting up the hardest level in NES Tetris (there are many online emulators) and trying it yourself. The low levels seem so easy, but don't be mistaken. If you are interested in some more information, ask me sometime as I love to talk about it (maybe a bit too much).



YO MAMA

Iedereen die Hiske kent, heeft vast een keer gedacht, poeh, 24/7 Hiske is toch wel een uitdaging. Nou, als haar moeder kan ik zeggen: dat klopt. Voor iedereen die haar niet kent, na dit stuk snappen jullie de eerste zinnen wel. Ik hoop niet dat jullie aan het einde van mijn relaas allemaal geen kinderen meer willen hebben, want dat zou ik toch wel spijtig vinden, de wereld heeft immers nog wel een paar knappe koppen nodig.

TEXT Hiske's mother

For the foreign students:

I'm sorry that the piece about Hiske is in Dutch. My English is so bad that I can't write in English but especially for you all, the summary: Hiske is the best and sweetest daughter and friend in the whole world, but drives you crazy from time to time.

In Hiske's jonge jaren hebben wij als ouders vaak gedacht, zit er ook een uitknop op. Hiske stond de hele dag aan en had de hele dag vragen. Hebben bomen ook gevoel? Waarom schminken de pieten hun gezicht? Waarom gaat mijn drinken naar beneden? Waarom, waarom, waarom? Toen ik haar vroeg: "Waarom heb jij toch zoveel vragen?" zei ze... omdat jij geen goede antwoorden geeft. Nou, dan wist ik weer waar ik stond.

Hiske kon dan ook niet wachten om naar school te gaan, want zij dacht: nu ga ik alles leren. Ik snap dat jullie dat op de uni niet meer herkennen, maar er was dus een tijd dat ze zat te trappelen om in de schoolbanken te mogen zitten. Dat was alleen wel van korte duur, want na de eerste dag op school kwam ze thuis, smeed haar tas in de hoek en zei: "Ik zit in groep 0, 0 is niks, ik mag ook niks, ik leer ook niks en ik ga niet meer terug!". Ik kan jullie vertellen, dan moet je als ouder echt je best doen om je kind weer gemotiveerd naar school te krijgen. Mijn excuses aan iedereen die naast haar in de collegebanken zit, want volgens mij is dat dus niet helemaal gelukt, gezien haar continue klaagzang over haar leerkrachten, docenten of professoren. Dit gaat dus al terug naar 4-jarige leeftijd.

Ze heeft wel momenten gehad dat ze enthousiast werd door school of door schoolopdrachten. Zo moest ze namelijk een kettingreactiebaan maken met verschillende overdrachten van energie. Daar ging ze helemaal op los. Ze wilde zoveel mogelijk verschillende soorten energieoverdrachten gebruiken. Dagen was ze aan het bouwen. De baan begon op zolder, ging door de slaapkamers, naar buiten en daar had ze een overdracht met chemische energie (mentosnoepjes die vielen in een fles cola). Crisis wat een ellende, maar goed als Hiske ergens voor gaat dan is ze ook niet meer te stoppen.



Van jongs af aan was het al duidelijk dat Hiske een slimme meid was. Ze kon haar voorleesboeken letterlijk aan haar broertje vertellen, terwijl ze deed alsof ze kon lezen. In reactie op de vraag van de arts op het consultatiebureau of Hiske op 1 been kon staan, vroeg zij als 1-jarige dreumes: op het linker of rechterbeen mama? Toch waren er ook momenten dat wij dachten: hoe kan een meisje zo slim zijn en toch zulke domme dingen doen? Zo heeft ze een keer bijna het hele huis af laten branden. Ik had namelijk aan Hiske gevraagd of ze even een pizza in de oven wilde zetten en dat had ze toen gedaan, met doos en al. Of dat ze als een kind met haar loopfietsje van de picknicktafel af was gefietst, puur en alleen om te kijken of dit kon.



Dat is ook Hiske, niets is haar te gek, ze gaat geen uitdaging uit de weg, springt in het diepe en leert onderweg wel zwemmen. Fake it till you make it, werkt prima bij haar. Ze weet van aanpakken en vindt overal wel een oplossing voor. Ook als we met zijn zevenen in de auto moeten geen probleem, Hiske lost het wel op. Wel jammer dat de mensen die ze lief vindt dan vaak de klos zijn...



Ik ben trouwens wel benieuwd hoe de studytrip gaat verlopen, want mijn ervaringen met Hiske op vakantie zijn: slapen, uitslapen, heel klein stukje lopen, thee met iets van chocolade, winkelen, ijsje, winkelen, iets actiefs (liefst iets wat ze nog nooit heeft gedaan), cocktails drinken, naar de volgende bar en cocktails drinken, naar de volgende bar en iets eten met een cocktail, naar de volgende bar voor een spelletje en een cocktail. Maar goed, ze is nog maar 20, dus in the USA zullen jullie weinig last hebben van haar drang naar cocktails.

Ondanks mijn geklaag (ja, van wie zal Hiske dat toch hebben) ben ik onmeunig trots op mijn lieve meisje en zal iedereen die haar echt kent, weten dat zij voor je door het vuur gaat als ze je lief heeft. Nou, dan neem je die rare fratsen van haar wel op de koop toe.

P.S. Mochten jullie nog invloed hebben op haar... stuur haar eens wat vaker een weekendje naar huishuis in het mooie en schone Twente :).





DINNER AT PARENTS FOR 80 PEOPLE, WHY NOT?

Imagine it is the Sunday before the intro and you arrive back home in your cozy student house from a nice holiday. Your roommate is also home and during a talk you discover that he, just like you, planned on hosting the dinner by parents at your house and not just him but 2 other roommates also had the same idea. Four groups that is, with an expected 20 people per group. We luckily have a nice garden at our place, but 80 is a lot even for us.

TEXT Joris Paree

The first thoughts are of course: 'maybe we can move to my co-parent Willem' and 'we could have planned this better with my roommates'. But also, the thought starts to creep up: 'could we not just manage'. So, Monday during the party, maybe a bit tipsy, the decision comes. Let's just do it! The choice is made to not just get fries but to make wraps. So, the first preparations start. Making a WhatsApp group with all co-parents, asking the board for the plastic plates (as we did not have enough ourselves) and calling a friend working to be a chef to see if she has any advice on cooking for such large groups.

A grocery list for Wraps with 80 people:

- 200 wraps
- 12 kilograms of chicken
- 14 cups of crème fraise
- 10 crops of lettuce
- 20 bell peppers
- 10 cans of corn
- 40 tomatoes
- 1 net of unions
- 8 bags of cheese
- 3 bottles garlic sauce

A grocery list is just the beginning, next comes the thought of what to do other than the food and making a planning. Next to the food and something to drink we needed to plan all around it. We arranged with the board that we could use the reusable plastic plates and cutlery from GEWIS. Willem would bring 5 more cutting boards and knives so to more quickly be able to prepare the vegetables. And as our garden would not be large enough the idea came to just barricade the side walk next to our house and put some standing tables here. Lastly on the morning of the dinner itself we called our local Turkish super market and asked them, 'can we pick up 12 kilos of chicken fillet this afternoon?' To our relieved surprise the answer was: 'do you want them whole or cut in cubes?' Now that the whole planning was laid out and arranged, in the afternoon the party dinner could start.

On Wednesday the intro schedule was done around 18:00 with the campus market. At that point we joined together with the groups to head towards our house. Luuk and I had already picked up the chicken a bit earlier in the afternoon. Jarmo and Tycho arrived first at the house with their group after getting some sodas at the Lidl. Steven, Ruben and Jarmo then walked to the Plus just 100 meters from the door to load up a shopping cart with crates of beer sponsored by us as parents. Luuk and Bas had the largest challenge as

they went to the Lidl directly to do the actual groceries. Doing the groceries in such amounts is already some work however, the largest challenge was getting this all home on the bikes with their group. With some struggle but great effort they managed and when they arrived, we could start cutting and preparing. In the meantime, Steven, Ruben, Willem and I arrived home with our groups and started preparing the house. Moving all chairs outside and putting the kitchen table to the side to serve as a buffet table later. Since there was rain expected, we hung up two tarps we luckily still had laying around, with rope that was scarcer but with the use of one shoe lace we also managed this. When Luuk and Bas arrived with their group we could start cutting all the peppers, tomatoes and unions. The tactic for this was putting the kiddos to work. We gathered all cutting boards and knives we had and gave this to the kiddos sitting and chilling outside with the vegetables and a bowl/pan to put it in. At the same time, I started baking all the chicken on the gas stove, three pans at the same time did the job. But still 12 kilos of chicken is a lot I tell you, as in total it took an hour and a half to bake it all. During this preparation Willem and Jarmo biked to the Action to get two standing tables (which sadly were not allowed to be declared by the CIC), this way we could give everyone a spot to sit or stand at to eat their dinner.

In the kitchen we moved our table to the side and used this to serve the food on. At the beginning of the table, you could take a plate and put a wrap on it, next was chicken and after that came the tomato, bell pepper, lettuce, union, corn, cheese and garlic sauce (for the attentive reader, yes, we intentionally forgot the crème fraiche so we had enough for the next couple of months at home). As our kitchen is not that large and we did



have a lot of (hungry) kiddos, the tactic was to make one row through the kitchen. Once the first batch of chicken was done, we ordered everyone to actually walk around the house to our front door, enter inside to the kitchen, walk past the table and build their own wrap and exit the kitchen via the back door. This did wonders in getting everyone a good plate of food in a structured manner, even with their own choice of content in their wrap to everyone's liking. And for the dietary wishes we easily swapped out some vegan chicken and gluten free wraps.

Once the dinner was finished half of the parents cycled with the group of kiddos back to uni to enjoy the GEWIS party. With the roommates we did a first round of cleaning (the second round we left for a hungover Saturday after the intro). Once this was done, we also cycled to the party. As we had multiple crops of lettuce left over, we took them with us. I can tell you, a crop of lettuce is a pretty nice festival snack "uit het vuistje".

I really enjoyed it very much myself and was happy with how well it went, for me it really felt like "the more the merrier". From the kiddos I heard a lot of compliments how much they liked it and how it was nice to be able to socialize with such a large group. This really made my day. So I could only recommend all readers to just go for such a challenge if you get in the situation.



HORSE RACISM IN PARADOX CITY

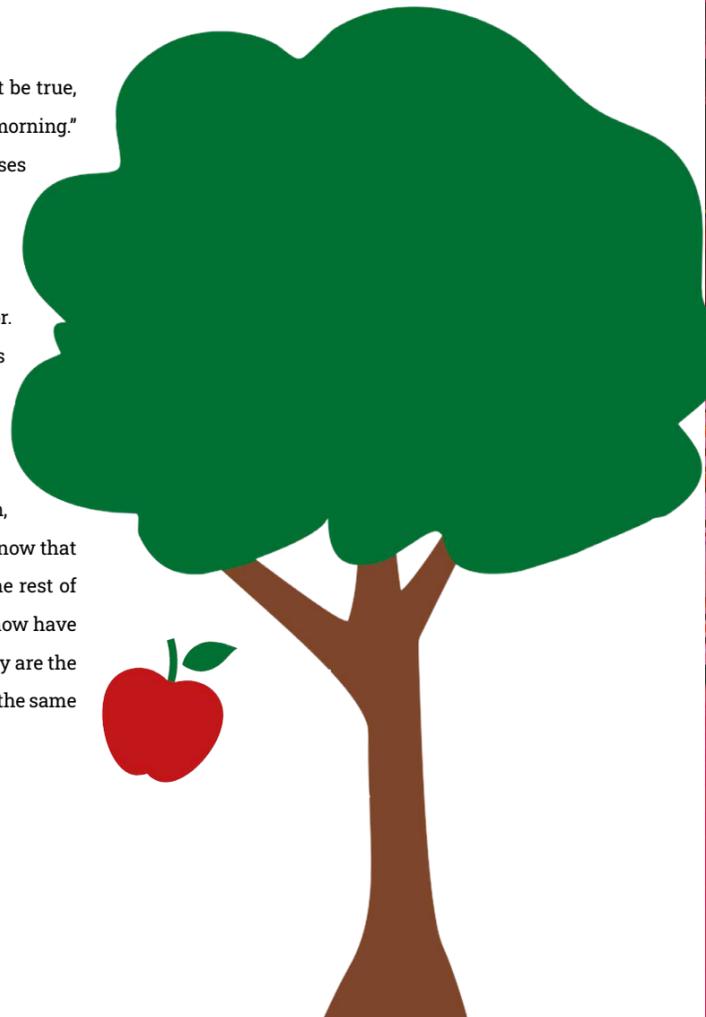
It's a lovely day in paradox city. The grass is green, the girls are pretty and the city is effervescing with life. You and your family are taking a stroll through the park when suddenly a gang of horses snatches your loved ones away.

TEXT Koen Deen

"Please give me my family back!" you say, but the animals won't listen to you that easily. "I need the ransom money to feed my family," the first horse says. "We are the last black horses out there."

"Do you not know that all horses are black?" you say. "The evidence is all around us." The horse says: "I don't see any other black horses..." and he is right, but you tell him: "If every horse is black, then all things that aren't black aren't horses. The red apple hanging from that tree is not black and not a horse, so it supports my claim." With every red apple and green leaf he sees, the horse is more and more convinced.

A second horse speaks up: "Hey that cannot be true, my cousin is a grey horse, and I saw him this morning." "You must be mistaken," you tell him, "all horses are the same color, I'll prove it to you: You can easily see that a group of $n=0$ or $n=1$ horses always has the same color. Now assume n horses always have the same color. We want to prove that a group of $n+1$ horses is also of the same color. To add this extra horse, we will first remove a horse from the group of n . If we now add the new horse, the group has n horses again, which by assumption, means that they are all the same color. We know that the removed horse has the same color as the rest of the group, so if we add this horse again, we now have proven that in every group of $n+1$ horses, they are the same color! Then by induction, all horses are the same color."



Dazed and confused, the horses accept your solution to horse racism. Having put them in a state of goodwill, you kindly ask them again to release your family. "Alright then," their leader says, "we'll release your family if and only if you predict correctly whether I release them or not." Being the logician you obviously are, you know that predicting their release is not wise, as now the horses can do whatever they want. Hence you predict that the horses won't release your family, leaving them with no way to keep their word. They hurt themselves in confusion and you and your family live happily ever after.



SLIGHTLY OFF SCRIPT

[Inhaling and exhaling deeply]

[Male] OK... Here we go. Focus. Fun. I am fun.

[FYCs whizzing past]

One winner, 4 losers. I eat losers for breakfast.

[Excitement accelerating]

Breakfast. Wait, maybe I should have had breakfast.

A little frikandel could be good for me. No, no, no, stay focused. Fun.

[People cheering]

I'm funner than fun. Cooler than cool. I am Slightly Off Script!

[Pounding on door]

[Crowd] Hey, SOS! You ready?

[Tessa Verheul]: Oh, yeah. SOS is ready

[Keyboards clacking] [Brains working] [Crowd cheers]

Ka-chow!

[People partying]

[Shots being drunk]

Get your beers here! Go, SOS! - Whoop! - You got that right, slick.

[whistles] [Air wrench whirring]

[screams]

[Male] Welcome back to the 2024-2025 school year at TU/e.

[Crowd cheers]

[Bob] I'm Bob Cutlass, here with my good friend, Darrell Cartrip. We're midway through what may be a historic day for FYCs.

[Darrel] Bob, my blood pressure's through the roof. If this gets more exciting, they're gonna have to tow me outta the booth!

[Bob] Right, Darrell. All the FYCs are neck and neck in the season points, heading into

the second half of the year. And the winner of this will win the season title and a place in the FYC hall of fame. Does Barbi/e have one victory in them before retirement?

[Darrell] They've been GEWIS's golden child since their inception! Can they win the FYC of the year title?

[Bob] And, as always, in the second place spot we find Icebug.

They've been chasing that point lead their entire career.

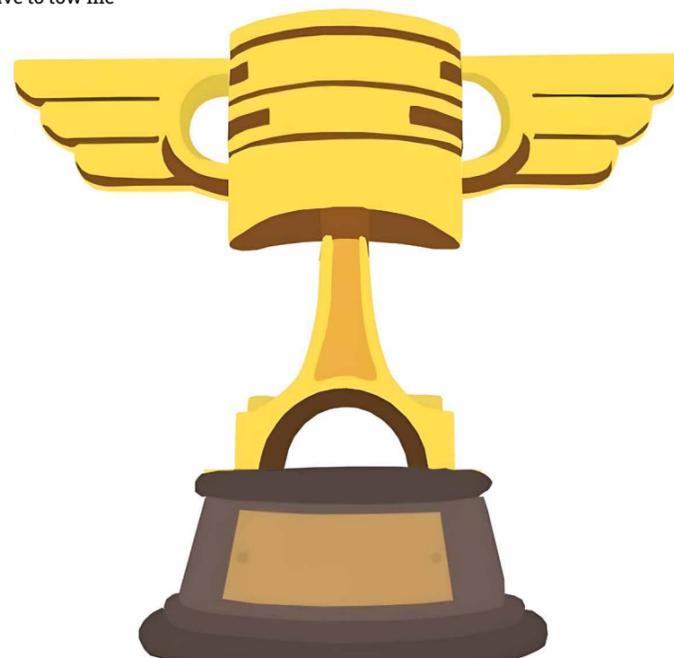
[Darrell] Icebug thought this was their year. Their chance to finally emerge from Barbi/e's shadow. But the last thing they expected was... Slightly Off Script!

[Bob] You know, I don't think anybody expected this.

The rookie sensation came into the season unknown. But everyone knows them now.

[Darrell] Will they be the first rookie to organize fun events, uplift students' atmosphere, and land GEWIS' adoration?

[Bob] The legend, the runner-up, and the rookie! Three FYCs, one champion!



Infimum: A strange or funny quotation from a teacher, a student or faculty member. Here you can find infima sent to the Supremum committee via inf.gewis.nl.

Dhr Koster: "Deze kaas is een beetje onder de kazen wat de ATHENA cocktails zijn onder de cocktails."

Jens K.: "Ik dacht even dat er een messentrekker binnenkwam, maar het was gewoon Tom."

Jelte de K.: "Da's wel heel maand'lijksch, das bijna een half jaar"

Tom U.: "Ik kon niet rukken dus ik heb Nexus geupgraded"

Bartjan H.: "I do understand why you feel that way, it's just that your feelings are wrong."

Jesse: "Wat als je om 1 uur een gratis 12 uurtje haalt?"

Lennard: "Ik doe niet aan wintertijd"

Bartjan H.: "Ja, sorry; ik was te hard aan het lullen over mezelf."

Lora: "Data Science is a buzzword diploma"
[Editor's note: no it's not >:)]

Ciska: "Jelte wordt gedechargeerd als lid van ATHENA"

Jelte: "Ja prima"

Koen: "Frans is wel sexy"

Lucy met handgebaren: "Mhmm baguette!"

Inge S.: "Het is wel questionable dat je het daarvoor erover had dat je je ballen in Jenever ging stoppen"

Dhr. van Dijke: "wij zijn wel een hetero dispuut"

Alexa V.: "Thomas! Ik accepteer veel van je gehuil, maar dit gaat echt nu te ver!"

Prins Job I.: "Ik weet niet eens wat het gekkengetal is joh."

Roy: "IK HEB TEGEN DE AMON VERTELD DAT IK NOOIT MEER GA DRINKEN"

Dhr. Koster over Robin die aan het boekhouden is: "Dat is een soort Habbo, maar dan met echt geld."

Noa: "Vo voor meer bier!"

Elwin H.: "Liefde gaat door de anus."

Robin v. D. zit bij PC B te kijken

Noël v.d.V.: "Staat er koelvloeistof"

Robin v.D.: "Nee volgensmij niet. Ah kut!"

Bartjan H.: "Heb je al je break-up talk met Lieke gehad?"

Lotte L.: "Nee... maar ze heeft het wel door wanneer het gedaan is."

Luuk B tegen Arend R.: "Je wou hier zelf bijzitten, dan moet je ook accepteren dat je een sletje bent"

Jens K.: "Robin C.: "Ik stoor me soms aan de vorm van Ciska's hoofd.""

Robin v. D.: "Ja, daar had best ook v. D. kunnen staan."

Maiko C.: "Bartjan is gewoon een virtue-Belg."

Jeroen K.: "My son has now reached the age where he makes jokes like 'it is green and it sticks' "

Lucas M.: "So about Robin's age then?"

Anoniem: "Hey dat is die non-binaire meid"

Jan tijdens een hackathon: "Now we debug, 9 minuten."

COMMITTEES & FRATERNITIES

GEWIS is built on top of committees. Besides, Study Association GEWIS has several fraternities which contribute to the atmosphere and organize activities.

Find out more at: www.gewis.nl/association.

FRATERNITIES

ATHENA
ATHENA



B.O.O.M.

Buitenplezier Op Onze Manier



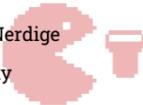
Défi

Défi



GEPWNAGE

GEWIS Plant Weer Nerdige
Activiteiten en Geeky
Evenementen



I.V.V

In Vino Veritas



COMMITTEES

ABC

ApplicatieBeheer Commissie

AC

Activiteiten Commissie

AVICO

Audio- en VideoCommissie

BAC

BAr Commissie

C4

Corporate Communication and
Contact Committee

CBC

Computer Beheer Commissie

CC

CarnavalsCommissie

FYC25-1 Omnis

First Year Committee

FYC25-2 Icebug

First Year Committee

FYC25-3 Barbi/e

First Year Committee

FYC25-4 Drunkhoven

First Year Committee

FYC25-5 S.O.S.

First Year Committee

GEBALLMERPIEK

GEWIS'sers Ervaren BALLen
MEt Rigoreuze Precisie In
Excentrieke Kups

GEBEP

GEWIS Borrows Euler's Proofs

GEDWAAL

GEWIS'ers Dwalen Waar

Anderen Anders Lopen

GEFLITST

GEWIS Fotografeert Leden In
Toffe Situaties, Toch?

GEHACK

GEWIS Ervaart Het
Algoritmisch Code Kloppen

GELIFT

GEWIS'ers Liften Ieder

Fantastisch Traject

GEPAALD ★

GEWISers Plaatsen Alle

Activiteiten Langs Delft

GESPORT

GEWIS sport

GETAART

GEWIS'sers Eten TAART

GEWISKI

GEWISers Ervaren Wintersport

In Super Koele Ijstijden

GEZWEM

GEWIS Zeilt Weer Een Meter

GSM

GEWIS Social Media

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Introduction Committee 2024

ODC

Ouderdagcommissie

RRC

Room Responsible Committee

SR

StudentenRaad

SUPREMUM

Supremumcommissie

TRAIN

Training

YBC23

YearBook Committee 2023

YBC24

YearBook Committee 2024

SUPREMUM COLOPHON

SUPREMUM

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