



Per vectum

FEATURING

- Finding Internships
- Amel's Poetry Hour
- Why social media algorithms are addicting
- Interview with 1st year students
- Horoscopes for Spring



vectum
Econometrics and
Operations Research

SPRING EDITION • 2020-21



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WORD OF THE PRESIDENT

Dear fellow members, professors, partners, and friends of our association,

Thank you for your interest in this third edition of our quarterly PerVectum, which was completed thanks to the hard work of our Secretary & P.R. Coordinator Joshua Vink and our P.R. committee members Amel, Izzy, Nhi, and Radina. Now that we are in the springtime of 2021, our association can look back on a whole year since the Covid-19 pandemic reached the Netherlands. To start this edition, I would like to take the opportunity to reflect on what our association has been through so far, where we stand now, and what we can look forward to in the foreseeable future.



First of all, as the pandemic continues to draw out further, we regrettably could not organise many events that we have come to enjoy at Vectum. Unfortunately, the annual Vectum Business Trip, which traditionally takes place in January in the Randstad area of the Netherlands, could not happen this year. This is a dispiriting consequence of the pandemic, especially for students graduating this year who are preparing for their next steps after their studies. Despite this, our members were prompted to get creative and devise online alternatives. In February, the 2021 edition of the Landelijk Econometristendag (LED) took place in a fully online format. This is the Netherlands' largest career event for students of Econometrics, Operations Research, and Actuarial Science, allowing hundreds of students to network with dozens of companies in various industries, such as logistics, data science, trading, finance, management consulting, governmental services, or marketing, among others. For this, I would like to thank the LED 2021 committee and our fellow study association Kraket at the VU Amsterdam. They had the unprecedented challenge of organising the first-ever fully virtual LED and their efforts are greatly appreciated by our association. Shortly afterwards in February, Amber and Kristina from the External Affairs committee prepared and hosted our first-ever online data challenge, aptly titled „Zoometrics“. Here, teams of students had 3 hours to solve Econometrics cases with their analytical and programming skills gained at university. In the end, only one team can take the claim of champions, so congratulations to the winning team of Caron, Lieke, and Sharon!

Later in March, Vectum members had the opportunity to participate in online cases with PwC and Gupta Strategists as a part of the Econometrics Consultancy Tour, which was organised in an online format with our friends at Asset | Econometrics from Tilburg University. For this, Anne from the External Affairs committee deserves our thanks for working together with our fellow students from Tilburg on Vectum's behalf. Although online meetings can not replace the true atmosphere of physical events, these cases successfully showed us how Vectum members will not let the pandemic discourage us from preparing for our careers.

After a year of dealing with Covid-19, loneliness, anxiety, health concerns, and „Zoom fatigue“ have all exacerbated both the physical and mental well-being of many students. In response to this, our Treasurer & Activities Coordinator Alexander Noordman took it upon himself to organise the first-ever Vectum Self-Care Week with the help of Lilly and Marie from our Social Initiatives committee. Within one week, students could learn about better self-care in workshops on diverse topics, such as motivation, yoga, sophrology, and burn-out. For this, I would also like to thank our guest speakers Jeroen Tessers, Jeanne Cunill, and Jacques Corillon for sharing their advice and expertise with our students. With their help, our members could learn specific techniques on how to take care of oneself, both mentally and physically.

As for our weekly Tuesday activities, Alexander and the Activities committee members Aisja and Hugo deserve our appreciation for continuing to be creative with virtual social events. To start the period, Aisja did a fantastic job in hosting an online quiz in the style of the game show Jeopardy!, which was followed up in the next week by a virtual revamp of our usual scavenger's hunt, where members were given a chance to be imaginative and adventurous within the safety of their own homes. In the following week, our members learned how to make delicious cakes at home without the need for an oven, which is a much-cherished luxury that many student homes are not equipped with. To round off our period, Edwin shared his expertise on chess in a workshop followed by an online tournament. This was in preparation for an online chess tournament hosted this April by our fellow E&OR students at VSAE from the Universiteit van Amsterdam. For this, I would also like to thank the LEST committee of VSAE for organising this engaging tournament for all Econometrics students across the Netherlands.

With respect to our academic events at Vectum, our members were given a very engaging behind-the-scenes lecture by prof. dr. Antoon Pelsser on his research with Netspar on risk-sharing under the new Dutch pension deal. For students early on in their studies, this was a first impression of the field of Actuarial Science, which Antoon teaches at master courses at the SBE.

I would like to thank Antoon for sharing his unique insights with us. Furthermore, Vectum could offer extra tutorials for the second-year courses Mathematical Statistics and Operations Research for the first time ever. For this, I would like to thank Joshua for his organisational efforts, the course coordinators Stephan Smeekes and Tjark Vredevelde for their guidance, and the first tutors for these courses: Amber, Siemen, Tobias, and Toby. Distanced learning has posed a significant challenge for both educators and students in higher education. Therefore, Vectum shall continue to support students even throughout the pandemic.

Despite this abundance of bad news as a result of the pandemic, I can still report positive developments within our association. First, Vectum will offer our first-ever extra tutorials in the second-year courses Mathematical Statistics and Operations Research. The respective course coordinators Stephan Smeekes and Tjark Vredevelde have been very cooperative and understanding towards these initiatives, and we are grateful for their support. Secondly, our negotiations with SCOPE Maastricht and the SBE Board concerning our legal relationship have made concrete and productive improvements. Our members will be informed about this in the upcoming weeks in preparation for our semi-annual general members assembly. Due to the lockdown, this will take place online on February 9, 2021. I look forward to welcoming you there.

Beyond the pandemic, this semester has seen another milestone for Vectum. At our last semi-annual general members' assembly, Vectum members voted to accept the proposed restructuring agreement developed by the current boards of SCOPE Maastricht and Vectum under the mediation of the SBE Student Representative and approval of both associations respective Boards of Advice. After many years of difficult negotiations, our associations can now close a chapter and lay the foundations for a future defined by mutual respect. Currently, Vectum is experiencing a transition from our current legal structure as an association to a new legal structure as a foundation. Under the proposed arrangement, Vectum would establish itself as a subsidiary study initiative of SCOPE Maastricht that keeps its own Vectum board, committees, finances, target audience of Econometrics & Operations Research students at SBE, external affairs, sponsorship, and public relations. This allows Vectum to remain a member of the Landelijk Orgaan der Econometrische Studieverenigingen (LOES), which is vital for the representation of Econometrics & Operations Research students at Maastricht University on a national level. However, SCOPE Maastricht, as the faculty association, has the responsibility towards the SBE to supervise and ensure that all subsidiaries, including Vectum, are managing their affairs appropriately. This means that SCOPE Maastricht would require Vectum to undergo regular financial and strategic audits to verify whether the Vectum board performs its tasks responsibly in the best interest of their target audience. This is a compromise that we believe is fair to both parties.

For reaching this agreement, I would like to thank the current Scope board and president Myrthe den Braber for being fair and respectful to the needs of Vectum members. Even though disagreements are unavoidable in any discussion, I believe our associations can put any previous difficulties behind us and fulfil our duties towards each other responsibly. Here, I would like to thank the SBE Student Representative Elif Karakurt for sharing her legal expertise and upholding her mission as a fair and objective mediator. Of course, none of this would be possible without the continued help of the Vectum Board of Advice, which is made up of my predecessors Martijn Schoenmaker, Merit Geldmacher, Dominik Dribusch, and Tobias Bechthold. This achievement in this year was only possible thanks to the previous hard work and determination of previous Vectum boards, who have continued to remain valuable to Vectum members by providing their advice and guidance throughout the entire negotiation process, from beginning to end. But last and definitely not least, I would like to thank my fellow board members Edwin, Joshua, and Alexander. Our shared time in the board so far has not been easy, with highs and lows that are truly unique to our year during the pandemic. In spite of this, my three fellow board members have always been a constant source of trust, support, and motivation, not only as teammates, but also as friends. Now that we are currently in the process of recruiting the next Vectum board for the 2021-2022 academic year, which we shall complete before the publication of our next edition of the PerVectum, I hope that my successor will be able to rely on and share the pleasure of serving Vectum members with a team that is as truly passionate, dedicated, and perseverant as I have been lucky to work with.

On this final note, I would like to wish you, our reader, an enjoyable experience with this edition of the PerVectum. Now that we are entering the final phase of the academic year, I sincerely hope that our members will be able to meet in person if it becomes safe enough to do so. Until then, I encourage our members to please stay safe, and I look forward to finishing this academic year together with you.



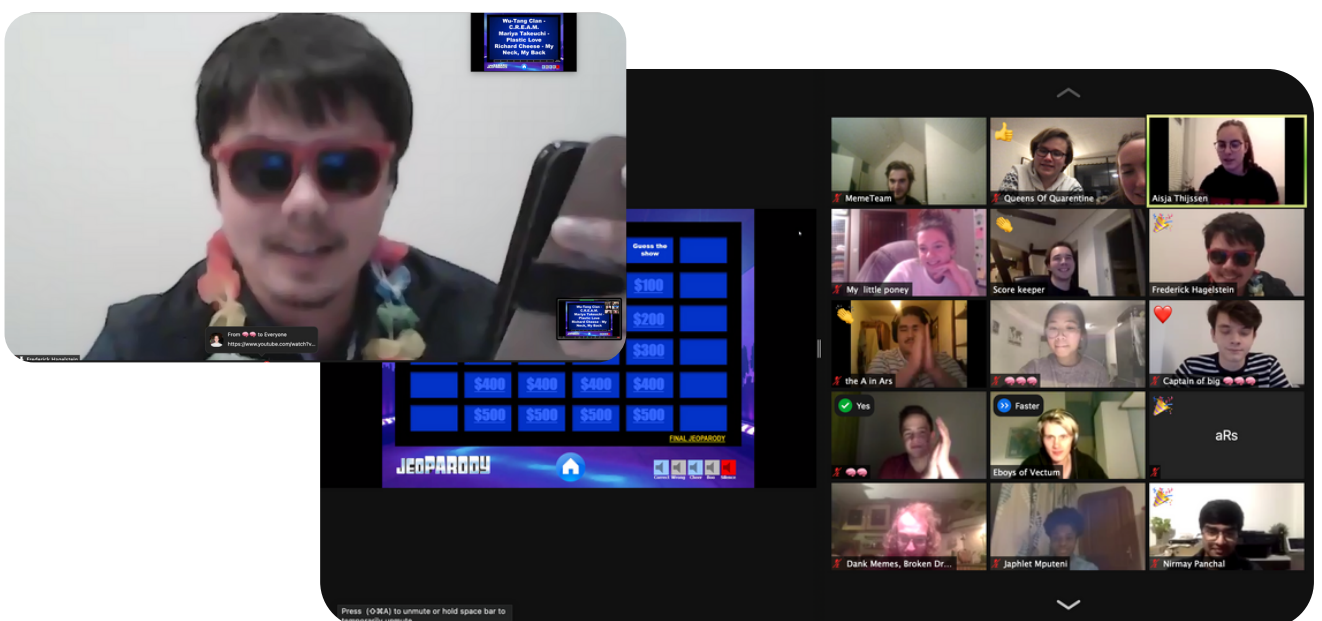
Sincerely yours,
Frederick Hagelstein
President of the 2020-2021 Board of Vectum

JEOPARDY! QUIZ

Vectum loves a good quiz, we love to break out our general knowledge in the name of the end of night bragging rights and intellectual prowess. COVID19 has brought us all many challenges. Although I am hesitant to call this particular case a challenge, organising our well-loved quiz nights has also seen its fair share of difficulties. This mainly came in the form of cheating, as every Econometrician knows, Google is their best friend, this fact no one seemed to forget during this Tuesday night activity.

Suspect activity and answers were presented by almost every team, who can blame them, the Shazam app is too user friendly not to use, and Google does have all the answers. But when asked to name ten dwarfs from Snow White and the dwarfs, maybe it is not best to answer in alphabetical order, as one might start to think one is simply reading off the front page of Google. But who is to say what really happened and who is to say cheating is wrong. We have all been given free will (well, depending on your beliefs) and we can use this free will to draw our own line of morality in the metaphysical sand. You might tell through my paltry justification of cheating that, I in fact, through the influence of some nefarious members of my team, cheating on pretty much every question. Although I consider myself of high moral standing I am not immune to peer pressure. This is my official confession. Despite these less than honest but effective efforts, we did not win. Maybe cheats never prosper, maybe we were not all that bright to begin with.

I genuinely commend Aisja et al. on creating an entertaining jeopardy style quiz through the mental fog that is another fucking zoom call. It ran smoothly and professionally, major props to the host.



No-Bake Cake Workshop

On Tuesday 2nd of March, Aisja and Alex decided to host a no-bake cake workshop. Making a cake has always seemed to be challenging since every ingredient needs to be exact, and some recipes also require exact temperatures. I am not the type of person who follows exactly every step in the recipes, so I have never thought baking would be something for me. I still decided to join the workshop with my 2 other fellows.

To my surprise, during the workshop, Alex's guidance to make his no-bake cake was really easy to follow and, more important, his recipe was very flexible. I could add a lot of as many random things as I wanted. We decided to add a small amount of Amaretto into the pudding because why not? Aisja also instructed us to make another no-bake cake but we were just too focus on the Oreo mousse cake. The cake needed to be chilled for at least an hour and sadly, we needed to go home quickly because of the curfew.

We came back to Tobi's house on Wednesday to enjoy the cake and maybe celebrate people whose birthday is on the 3rd of March as well. The cake tasted amazing. The sweetness from the pudding and the oreo base, combining a tiny alcohol taste of Amaretto and the sourness of fresh fruits was just perfect.

Thank you, Alexander and Aisja, for the wonderful recipes and the lovely workshop!



Research Lecture

with prof.dr. Antoon Pelsser

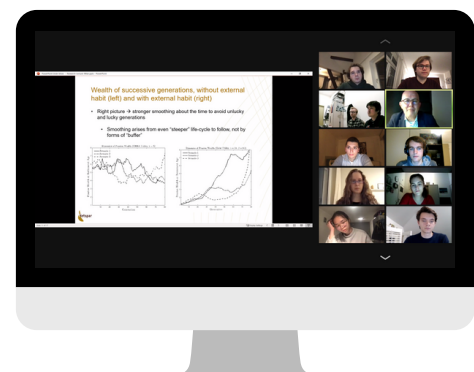
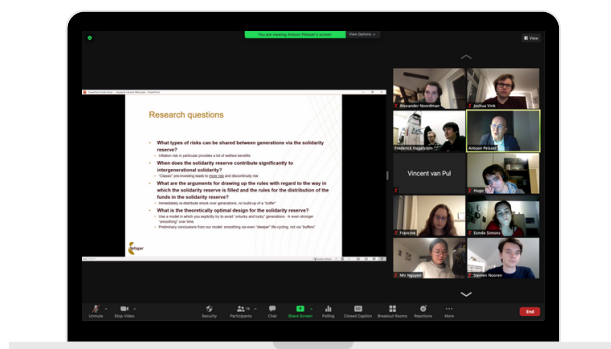
Topics in Actuarial Sciences

In every period, Vectum likes to host a research lecture where the students get to know a different field of their studies a bit better. These lectures are intended to light that spark within the students and think about what they can achieve once they finish their studies. We gave the turn to actuarial sciences this period, and we were introduced to dr.prof. Antoon Pelsser. Where his main topic of research was about the new features of the new Dutch pension plan.

With the use of academic literature, he explained his way through this new system and introduced us to solidarity buffers. These buffers are meant to absorb unexpected shocks in the pension fund system using solidarity reserves. After this introduction, he went through what the optimal design of this solidarity buffer should look like. He also guided us through some examples where we could see the workings of his research with a bit of an easier overview.

In Addition to the previously mentioned topic, he tried to answer a few sub-questions with his research. Such as what kinds of risk can be shared between generations via the solidarity reserve. And when does the solidarity reserve contribute to intergenerational solidarity? These questions provided some nice discussions and, in my experience, made the issue a bit more digestible.

All in all, this research lecture showed us the challenges that one can face when designing a pension fund. Especially the current and future issues we can encounter with the ageing population of the Netherlands. The solidarity buffer and reserve seem like a good solution to resolve this crisis, but of course, the world is not as simple as finding just one solution to a certain problem, and all should be taken with a grain of salt. Nevertheless, we would like to wholeheartedly thank dr.prof. Antoon Pelsser for this educative lecture, and we hope to see you again soon, perhaps in person!



SELF-CARE WEEK

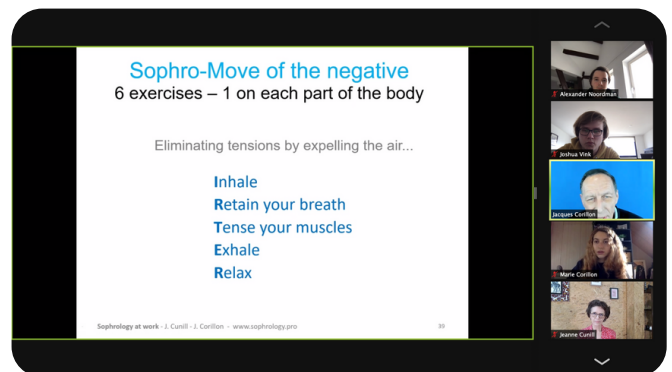
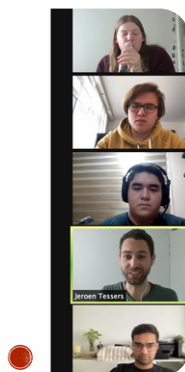
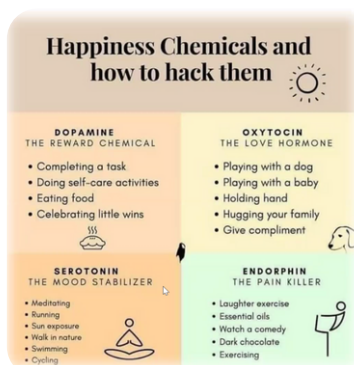
This year, for a first in Vectum's existence, a wellbeing week was organised. An idea like this was much needed, as the effects of the lockdown are well-known to negatively impact students' mental and physical health. The team of Vectum came up with a nice variety of activities, organised by different speakers.

The first activity I attended was the motivational workshop. Here, the speaker introduced a framework in which one identified the thing you were struggling with and made yourself talk as if you are that certain struggle. Then, the question is asked what this struggle brought you, what negative effects it had, and what would be the worst possible outcome of doing the opposite. Doing this proved to give some insights into working towards improvement.

On Wednesday, I attended a workshop on Sophrology, given by the lovely parents of Marie Corillon. They are experts in the field and have been practising it for many years. With the help of breathing techniques, you could clear the tension in all parts of your body. The interaction between both parents of our beloved Marie was adorable, which made the session fun, as well as educational.

Finally, on Friday, I attended the workshop that tried to help build skills to prevent getting a burnout. This session was with a smaller group, but the conversations were practical and healing in many ways. Personally, my takeaway was in an area only slightly related to the topic at hand. Sometimes, I find it hard to accept other people being too scared to open up; I want them to be comfortable enough to share what they are worried about, as I know it helps me cope with life. However, my primary reaction is to be disappointed and to persevere in making them open up. The realisation I took from the session is that the first thing to do is to actually listen to the person, accept them as they are, and acknowledge the situation. Thanks for the valuable life lesson, Vectum!

Altogether, the week marked a change of pace from the normally upbeat and not very much reflective social events. It was great seeing Vectum pay attention to this important part of student life, and I would recommend having a similar series of events next year.





Chess Workshop

The saying goes, great minds think alike, but what happens when they have to compete against each other for the greatly coveted title of the ultimate Vectum chess champion? This is exactly what happened on the night of the last Tuesday activity for period 4, where multiple people of Vectum brutally battled against each other, trying to outwit their opponents by creating vast strategic plans in aim to claim their opponents king.

Be it experts or new-comers to the game, we were introduced to the classical game of chess by Edwin. He quickly went through all the basic moves of all the pieces, like that the horsey can make an L kind of move and that the diagonal piesty can move diagonally. After this lovely introduction, he went over some more upper level strategies using a simulation programme. Now I don't want to brag, but I think I would place myself on the same level as the fictional character Beth Harmon. Oh, but then before she was introduced to chess... In other words, I had no clue what was going on most of the time, but the other members seemed like they enjoyed these hypothetical scenarios.

Once everyone processed all this new information, we got split up into two different gangs. In a true East-side West-side fashion, we had the beginner-intermediate group and the expert group, although here, the two groups didn't compete against each other. Instead they were more like any other student who procrastinated their exam paper deadline till the very end and had battles with themselves. These within group battles went quite smoothly, there were only a few times that people had to wait for the next opponent, as some games took longer than others. But in the end most people were able to face each other and test out their skills with the digital ivory pieces.

Who is to decide who the greatest chess player of Vectum is? Well this remains to be quite the challenge... One would say this can be easily seen on the chess.com platform, however their interface remains a mystery to some. Hence, a definitive answer remains yet to be found. Therefore, the winner of the Vectum chess tournament will go along with the other great mysteries of the world, like what happens in the Bermuda triangle and will the university ever open up again. In any event, we hope that all enjoyed and that you have learnt something new during this digital workshop and tournament!



Interview with a first-year student

I would like to thank Barbora and Emil, both budding and fresh faced first year Econometricians, for answering a few insightful questions. We are looking forward to meeting them in person and integrating them into the Vectum community. One of us!

**Barbora is in pink and Emil is in blue, any heteronormative assumptions you make from this are entirely up to you. #abolishGender*

How old are you?

Barbora: 20 years old

Emil: 20 years old

Despite the obvious, have you enjoyed your first year in Maastricht University?

Barbora: Yes, I have enjoyed this year very much. When I applied for the program I didn't know what to expect and I have also never been to Maastricht before, so I was pleasantly surprised by how much I like it all.

Emil: Yes, I think it was still enjoyable and I got to learn lots of interesting stuff, meet some new people and also, I was living on my own for the very first time, which was all pretty exciting.

What has been the best experience so far of your University career?

Barbora: Being able to go to the university at least twice a week during the first half-year. Although we didn't get to fully experience university life, it was great to walk around the SBE and have the opportunity to get to know my classmates personally.

Emil: Honestly, online education can be a bit uneventful and in general I think the best experience so far have simply been all the occasions in which I got to meet people on campus.

What was your favourite course and why?

Barbora: My favourite course so far has been Analysis 1 or Analysis 2 because they deal with mathematical topics I find interesting and mostly enjoyable to learn about. I have also always had great tutors for this course.

Emil: If I had to rank my top 3, I would probably have Analysis 2 as first, followed closely by Analysis 1 and then Linear Algebra will come third. In general, I think I just enjoyed the math courses more than the economic ones and I place both Analysis courses higher, simply because I got higher grades in them.

Have any of the professors/tutors been extra helpful during zoom education?

Barbora: From my experience most of the professors/tutors are doing their best to make the online setting as good as possible. Of course, being in the classroom would be in a lot of cases better but under these circumstances I am satisfied with the level of the online lessons.

Emil: I think most of them do their best to help and I hadn't really had much problems with the online education model but I do feel like most of the tutors/professors are just better used to the on-campus model and tend to be more helpful in-person.

Do you have any Uni related bucket list activities for when things start to go back to normal?

Barbora: I don't have any bucket list in particular but, of course, I am looking forward to experiencing all the aspects of the true uni life, spending time on campus and having a lecture in a big lecture hall. I would also like to participate more in events organized by study associations such as Vectum. Although I have enjoyed those I have joined so far, I am looking forward to joining real-life events.

Emil: I actually still haven't set foot in the university library and that is definitely something on my bucket list. Otherwise, I am not sure how uni related that is but I definitely want to go to some wild student parties before I graduate and I am also looking forward to joining Vectum events in-person, if corona ever allows for both.

In what way do you feel, if any, have you been disadvantaged during the corona pandemic, particularly as a first year student?

Barbora: In my opinion one of the disadvantages first year students are facing because of the pandemic is that most of the fun activities (such as INKOM, carnival or kings day), which a lot of international students haven't experienced before, have been cancelled or done in an online format. We mostly got to experience the "bad" part of the uni life which is the amount of studying and sometimes it can be hard to stay motivated.

Furthermore, the setup of some courses changes due to the online education and so we are the first year doing some assignments or papers instead of exams so we can not always base our expectations on how things were in previous years.



Emil: Mostly I think it is the lack of social life and in-person activities and not getting to know people that well, because even if you meet many people during online activities, if you don't meet irl you don't get to talk that much with them outside for study-related reasons and that leads to a situation where you do know a lot of people by face or name but you don't really get to know them in a meaningful way.

Regarding education I think the disadvantage for some courses has been that everything still isn't perfectly suited for online education and that leads to some remodelling of the course structures and that can be quite confusing at times. Also, the organisation of the lectures and tutorials had clearly first been made with on-campus education in mind. I do think though that tutors/professors are getting better and better at adapting to the online environment and there is even some notable improvement from the first semester to the second one. (For example, making lectures from scratch, which are shorter and more appealing, than the reused recordings of lectures from previous years)

Do you wish you had waited a year to start, why or why not? What if anything, would you have done differently during this year?

Barbora: No, I have never considered taking a gap year so starting a university, although under these circumstances, was my only option. However, it was amazing that we got to do mixed education for at least the first half-year, because my experience would probably be worse if I started university without ever going there personally and seeing at least some people and professors in person.

Emil: Definitely no, I did not have any plans to do a gap year in general but I think also with corona around if I had gone with it, it would have been a waste of time. I am very content with the studies and university I've chosen and even though the situation isn't perfect, I doubt it would have been much better in a year.

Do you believe there is an organisation that secretly runs the world and is putting micro-chips into everyone through the vaccine?

Barbora: No, I don't understand how people who carry their phones with them 24/7 and have 4 different social media accounts that have so much data about them, can be so paranoid about getting a micro-chip through vaccination. Although during my lowest academic moments (usually during an exam week) I wished it would be true so I could get one and at least understand the maths better.

Emil: I just got the shot recently and I am waiting for Bill Gates to activate my micro-chip any day now. I have already pledged my allegiance with the lizard people – you should too. Seriously though, people should vaccinate, I know uni students can be quite the overthinkers but don't put too much thought into those conspiracy theories please.

How to find an internship

AS TOLD BY ALEXANDER

Ask any master student in econometrics and chances are this person is doing an internship at some company, be it at a large multinational or a local company. I am one of those students that is doing an internship at a local company. In my internship, I am conducting research in price forecasting for a local steel trading company with offices in Maastricht and Germany by the name Vogel Stahl. It is a young company with ambitious plans to be one step ahead in the steel market using data intelligence. If you had asked me a month before getting the internship offer what Vogel Stahl is, I would have had no idea. Even more so, I would have never expected to be working in the commodities industry. Before this opportunity came by, I was mainly focused on getting an internship at a large consultancy firm, where I would like to work after my masters. In this article, I will be sharing how the process of getting my internship looked like and my thoughts about it.

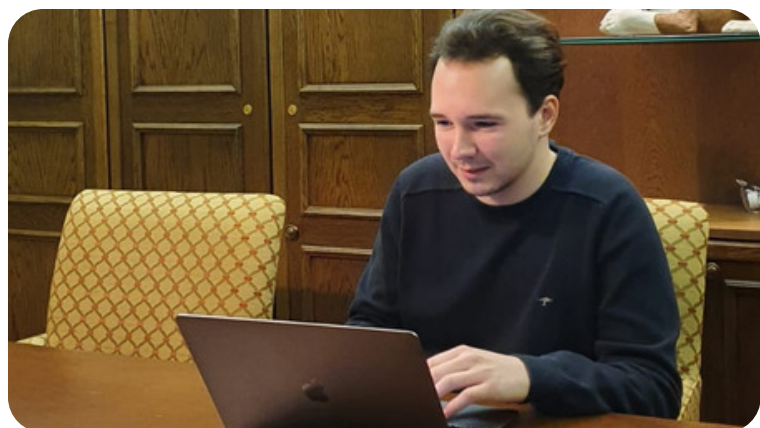
Towards the end of last summer, before starting my masters, the idea of doing an internship first crossed my mind. I talked with my dad about what I want to do after my master when he suggested looking into consulting. I did my research and fairly quickly found that the consulting sectors is a good match for me. This was when I noticed that the big four consulting firms (EY, PWC, Deloitte, KPMG) offered thesis internship opportunities where I would be able to get to know the consulting sector and do my thesis at the same time. I was very excited and started reaching out to recruiters to ask more about the internship and the opportunities they offered. In the end, I applied for two internships in financial research. For one, I was directly (wrongly) rejected, and for the second application, I reached the final round of interviews. The first internship I applied for was a bit underwhelming. I applied well before the deadline but simply did not hear back for a long time. When I followed up, I was told that I was rejected because of a mismatch in my background. This can happen and no one should be too put down by it, however it is of course never nice to be rejected.

I was a little disappointed, the vacancy asked for econometric students, which, the last time I checked I am. Now I see this as a blessing in disguise as I now know that I do not want to work for this firm in the future, so I still got something out of it. The second application was, in contradiction, very pleasant. I applied and within a week heard back that they believe that I match the profile they are looking for. Soon after, I did a personality and intelligence test, which I passed with flying colours. The next step in the process was the final interview round, where I got to speak with two senior associates in the risk department. Fairly quickly into the interview, it became clear that despite matching with the academic and personal profile they were looking for, that the risk sector does not interest me as much as I thought.

Within a couple of hours after the interview, I received a follow-up phone call where they told me they don't think my interests in risk is strong enough to spend 6 months researching it. While I agreed with them and am at the end happy I got rejected, I was feeling a little down. All the internships I applied for were either filled or did not match with what I wanted to get out of it. As a time reference, by this time it was already early January.

I told my supervisor Hugo Schyns that I did not manage to get an internship position. He told me about an internship position at Vogel Stahl, the university offered through the finance department. At first, I was reluctant to apply as the steel market was something that was not on my radar before. After other people told me to just go for it and see how it is, I set up an interview to discuss the internship position. To my surprise, I was hired on the spot! I was a complete rookie and knew almost nothing about steel, and here I was dedicating 6 months of research to the steel market. The company owner, Friso de Vries, invested a lot of his time to help me get acquainted with the steel market and answered any question I had, also the stupid ones. About a month and a half into the internship, I also represented the company at a steel market conference focusing on scrap metal. The help and resources I have received from Vogel Stahl is nothing short of amazing, and I count myself very lucky to have found this internship.

This experience has really been an eye-opener and a reminder for me that you should always keep your options open, even if you don't think you will take it, and that being rejected can also be a good thing. Have I kept myself stuck on only wanted to get an internship at a consulting firm, I would have never been able to do the cool and exciting things I am doing together with Vogel Stahl. Further, by simply going through the process and reaching out, I know better what I want to do in the future. This is also why I highly recommend every master student to do a thesis internship. Even if you end up not getting one, it is still worth it. If you want to know more about what I am doing or more details on how the process went for me, please feel free to reach out to me.



Five life lessons learnt from a year in lockdown

It's good to experiment

When you are stuck with mostly yourself, or a few close friends, and your only responsibility is to show up for zoom classes, it can be more tempting to experiment. Whether you change up the way you look, take on a new hobby, or decide to live a healthier life, this period allowed you to express yourself in new ways, not bound to the regular representational norms expected in face-to-face situations.

Appreciate your friends

It's easy to overlook the importance of the ones next to you, especially when everything is one big haze of hurrying for online tutorials, and the deadlines are creeping up. However, during this and previous lockdowns, you might have been separated from all the lovely friends.

Never take the preuv nights for granted

What now seems as just distant memories of cold nights, standing just outside in the rain, or enjoying the last sounds of piano man with everyone screaming their lungs out, was just routine back then. How lovely were those nights, that content feeling, walking home in the last summer days, another night stayed until 2am, knowing well that that 8:30 lecture is going to be so hard the next morning :)

Structure makes it survivable

In the pandemic, every day can seem the same. Wake up, shower, do uni work, go to bed. Before, you could have plans every Monday, but you do need to make somewhat of an effort to actually keep it all sustainable for yourself. Having those regular things to look forward to can make doing productive things easier.

People are so amazing!

Never underestimate the greatness of meeting new people. How interesting is it that you meet someone who has chosen such a different path in life than you? All those ideas and paradigms you never thought of considering. How enchanting is that sensation after an enthusiastic conversation with a total stranger!

DEAR MAASTRICHT - A BRIEF MIDNIGHT REFLECTION

Dear Maastricht,

It's midnight.

I'm rushing through the cobblestone streets, empty, calm. The orange lights reflect on the old alleyways and rising churches while waves of water in the Maas continue their long journey towards the ocean. A solemn soul wanders the quay, the water breaks on the ancient city walls. From a room in the top of a house shines a bright light; he watches into the distance, far into the night.

Dear Maastricht, I am home.

When I first met you, you held me hostage. Thrown into the deep, gone were the days of a warm, family home. Me, a foreigner. You, an overwhelming wave of different pathways. You threw up a wall, and every time I tried climbing up, I fell down. Your waves kept crashing down on me. I remember walking your pathways, thinking you'd never be my home.

Dear Maastricht, I was frightened

But then, the waves slowly receded. In moments of calm, I discovered your beauties and precious core. I found my piece of Maastricht in a small, cozy room near the Emmapplein. It shone bright, filled me with warmth. I opened up, and so did you. The city embraced my heart.

Dear Maastricht, I was filled with hope.

Through the winter cold, I saw you in a coat of snow. It was in these days that I saw how warm you could be. In days of darkness, your Christmas lights kept me company. The cold wind blew over the Maas, but it only welcomed me more. This city, once so estranged, became my fortress, my base.

Dear Maastricht, I felt protected

And then, I left you. It was so sudden, from one day to the other. The world was in a panic, and we did not escape. Your heart, oh so lively, was left cold. No longer were you a celebration of life, companionship and pleasure. The world paused, and so did you. I longed for your joy, your sunrises and sunsets, your adventures. Alas, we were separated.

Dear Maastricht, I missed you.

Summer came, and I visited a couple of times. I enjoyed the heat on your hills, a summer reconnaissance. Summer turned into autumn, and autumn into winter. Today, I see your streets. I feel the freezing air upon my skin, and see your people, some life again.

My broken bike tells a million stories. Stories of biking up the hills, day in, day out. Stories of sleeping over at friends, parties that last too long. Stories of summer heartbreak, and autumn love. Of making friendships and losing some. Of mistakes, but always growth. Stories about how this town has a place in my heart, forever.

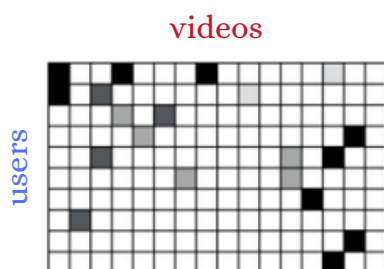
Dear Maastricht, I am home.

Why is the *TikTok* algorithm so addictive?

By this point we have all heard of TikTok. Whether it's from Trump's attempt to ban it from the U.S., viral challenges or its infamously addictive nature, the app has been in the headlines for a while. Its interface is simple, the front page is called a FYP (for you page) where videos of different kinds are shown. The length varies from 15 sec to a minute and you can scroll through them continuously. While credit should be given to the amazing creators too, where the magic really happens, is the ability of the algorithm to match you to content you'd genuinely enjoy and keep you glued for hours. How does it do it? TikTok FYP page is notorious for knowing who you are and what you like even before you do.



Firstly, let's determine what kind of data the app is working with. By the time you create an account, TikTok would know your birth date, mobile operator, type of a device, screen resolution, IP, operating system and time zone. Through that they could conclude what languages you speak for example, whether you might be an Apple fanboy and where to place you in the generation war.



The recommendation system is built on a user-item matrix where each row represents a user and the columns are the videos to be recommended to the given user. The value in each cell represents the interaction between the relative user and video. This is a weighted calculation of factors like *user*

interaction such as video completion, sharing & liking, accounts you follow etc, *video information* which includes sound bytes used, images that appear on screen, words used (which are in turn analysed using computer vision and natural language processing) and *device & account settings* given when you register to the platform. Using this table the platform can find similar users and recommend videos those users have enjoyed. As storing this table can require a lot of computational power, machine learning algorithms like Matrix Factorisation are used.

Resources worth checking out:



Matrix factorisation techniques for recommender systems by Koren, Yehuda

Lemon Pound Cake



Hello Blossom! As lemons are getting more into season now. We thought that it would be great to show you a lovely lemon pound cake recipe! Pound cakes are very easy to make as the ingredients, like the name suggests, weigh all one pound! Although for the lemon to come out nicely, some ingredients in this recipe deviate from this name origin

Ingredients (Serves about 8 people):

Cake:

- 120 grams butter
- 320 grams granulated sugar
- 260 grams of all-purpose flour
- 1 tbsp of lemon zest
- 3 room temperature eggs
- 1 tsp vanilla extract
- 1/2 tsp baking soda
- 1 tsp baking powder
- 1/2 tsp salt
- 180 grams butter milk (karnemelk)

Lemon Syrup:

- 100 grams granulated sugar
- 115 grams lemon juice

Lemon Glaze:

- 120 grams powdered sugar
- 2 tbsp lemon juice

Method:

- Preheat the oven to 175 degrees Celsius and grease a 25 cm long loaf pan with butter
- Beat together the sugar and the flour, till light and fluffy
- Add the lemon zest and the eggs one at a time, till it is well combined
- Add the vanilla extract and stir it in
- In a separate bowl, mix the flour, baking powder, baking soda and salt, till well combined
- Then by alternating the buttermilk and the dry ingredients, add these to the butter mixture
- Pour the batter in the loaf pan and bake for about 1 hour, or till a skewer comes out clean
- Then in a small saucepan combine the ingredients needed for the lemon syrup, and heat up till the sugar dissolves
- Spoon the syrup over the cake every 20 minutes while it is cooling
- Lastly, in a small bowl, mix together the ingredients for the glaze and pour over the cake once it is completely cooled. Enjoy!

Horoscopes for 2021

Aries

Spring will be sweet to you

In the beginning, everything can be a little bit tricky for you, maybe you have something to struggle with, such as exams or schoolwork, but once you have fought through the tough times, everything will look really sweet. The key to getting through the hard times, is taking things on with a smile and daring to be bold. April looks to be a lucky month for you, sweetie Aries. You'll need to be more patient and chill, as the start of Mercury during this time could derail things and throw your daily life into freefall.

TAURUS

A new change is needed

This period will be marked by relentless determination and change, Taurus. At home, in your relationships at university, you will have to make a lot of (important) and take control of everything. If you're unhappy with how things are going, maybe change things up a little bit and keep focusing on your goals. Don't forget to take some time out for yourself this season and make sure you are happy!

GEMINI

Take it easy

Financial problems - a common student problem, could make an unwelcome visit but don't be scared. You have amazing powers of adaptability and will always find a solution to the problems they face. From May onwards, the stars have got some amazing things in store for your sign, and they are guaranteed to make you smile!

CANCER

Spring will be explosive

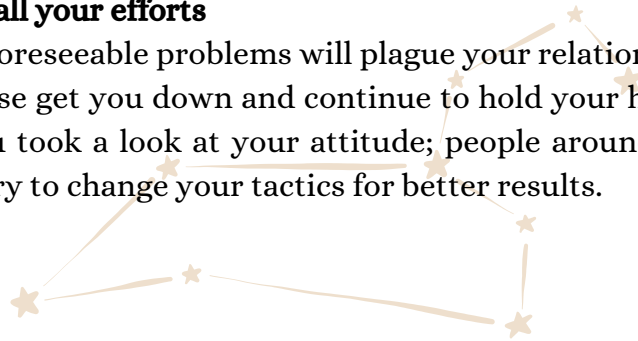
You are very demanding and won't think twice about getting your voice heard. Whether it's in love, with your family or at university, you will get problems solved quickly. You are done waiting for things to change on their own and are finally going to take your destiny into your own hands. These months are set to be busy ones for Cancers, but for sure, you'll love the excitement.

Horoscopes for 2021

Leo

Reward yourself for all your efforts

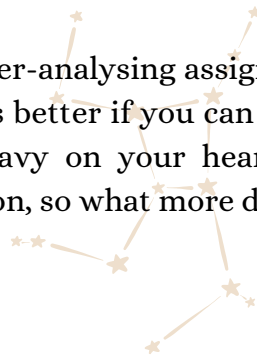
Frustrations and unforeseeable problems will plague your relationships and professional life, but don't let these get you down and continue to hold your head up high. However, maybe it is time you took a look at your attitude; people around you could find you a little too imposing, try to change your tactics for better results.



Virgo

You are craving for changes

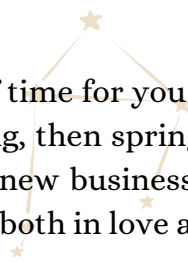
When you spend all your time over-analysing assignments in advance, you lose some of the excitement in life. Maybe it is better if you can relinquish a little control and take a risk. This spring, a question heavy on your heart has been answered. You already received your outside confirmation, so what more do you have to prove?



LIBRA

Undertake new challenges

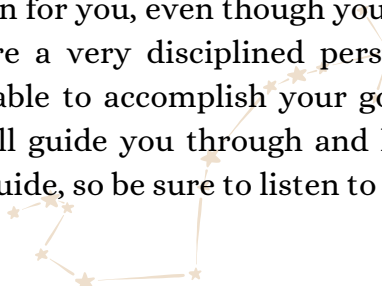
It looks set to be a beneficial period of time for you as long as you decide to take control of your destiny. If you want something, then spring is the best time to make it happen, so if you are thinking of launching a new business idea, go for it! The more ambitious you are, the more successful you'll be, both in love and financially.



SCORPIO

Looking forward

It's going to be a positive season for you, even though you will probably encounter some relationship problems. You are a very disciplined person and have decided that by following the rules, you'll be able to accomplish your goals. When you feel stuck in a situation, Mars and Saturn will guide you through and hand you the keys to success. Your intuition is an excellent guide, so be sure to listen to your gut feeling.

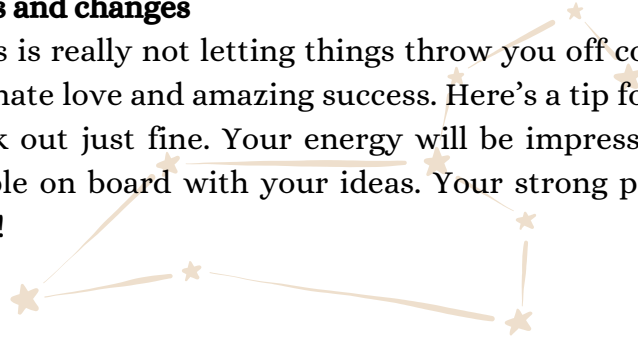


Horoscopes for 2021

Sagittarius

Lots of love, victories and changes

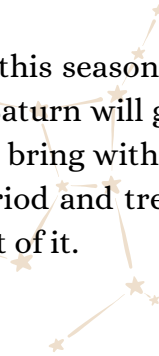
The secret to success is really not letting things throw you off course. Spring will bring with it lots of passionate love and amazing success. Here's a tip for you: go with the flow and things will work out just fine. Your energy will be impressive and you'll have no trouble getting people on board with your ideas. Your strong personality will see you through, so aim high!



Capricorn

Start your day with a smile! 😊

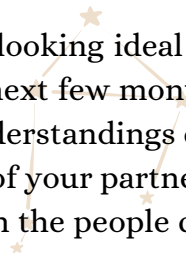
You are one of the luckiest zodiac signs this season. The stars really are spoiling you in all areas of your life. In April, Mars and Saturn will give you the extra boost you need to make progress in your projects. May will bring with it some evolutions in your finances, so make the most of the prosperous period and treat your family. An interesting offer could arise, so be sure you make the most of it.



AQUARIUS

Ups and Downs

The bad news is that this season isn't looking ideal for you, but rest assured that there will also be some good news over the next few months; especially financially. You could struggle finding your place and misunderstandings could lead to disagreements. Luckily for you, you can count on the support of your partner! Keep this piece of advice in mind; remember to share your problems with the people closest to you and they will help you see clearer.



PIECES

Lovely Spring

Spring is going to be a really prosperous period for you, even if the month of May is set to be stressful. Luck is shining down on your love life and your professional life. Use this time wisely and focus on launching both family and professional projects. Your intuition coupled with your creativity is really impressive and people are definitely noticing you more and more! Your biggest challenges are believing in yourself and having the courage to make decisions.

