

PerVectum

■ Quarantine Period

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- ▶ Keeping up with the Internationals
- ▶ Vectum Challenge Master
- ▶ Welcome to USA

SCOPE | Vectum



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Table of Contents

PerVectum

Magazine for
Econometrics students
at Maastricht University

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4	Word of the President
5	SCOPE Vectum Board 2019-2020
7	TRUE STORY: Interview with a Patient in Hospital During Quarantine
9	Keeping up with the Internationals
10	Quarantine Interview with Clemence
12	Quarantine Interview with Alexandra
14	Quarantine Interview with Anonymous E&OR International
15	Online Teaching Talks with Professor Alain Hecq
17	Interview with our Beloved Probability Theory Tutor
19	A Challenger has Arrived: Virtual Vectum Challenges
21	Econometrics Memes
23	Welcome to USA - Exchange Article by Ofek
25	The Ultimate Stay at Home Vacation Guide
29	Quarantine Cooking: Cheesecake Recipe
30	Farewell from Board 2018-2019

Word of the President

Dear Members,

It has been an honor to be on the board this year. There were ups and downs but in general a great experience. Obviously, this year would not have been possible without you, all of our members. Without your enthusiastic participation in all our activities this year, Vectum would not exist. I hope this will continue next year and we can show as many first years as possible how fun it is to be part of the Vectum family.

Sadly, we were not able to host activities anymore from Period 4 onwards due to Covid-19. Especially our business activities had to be cancelled which are usually exact in that time. Nevertheless, I want to look back at what happened this year. We started this (academic) year with a first year trip which was again a great success followed from great activities, some known already but also some new. On September the 26th the LEST took place. In this year it was our turn to be responsible for this event and I think I speak for all members who were present that it was a great success. Thanks to the LEST committee! The end of the year 2019 was celebrated with our traditional ice skating. On February the 8th we celebrated our 25th birthday, Lustrum V. A lot of old members joined, even from 20 years ago. It was super nice to exchange stuff about Vectum from old members. Thanks to the Lustrum committee for creating this event. We all had a lot of fun.

Academically, we also had some great events, with four very diverse and interesting research lectures as well as the extra tutorials for the first years. We have all been busy wrapping up our academics, so we can embrace our eagerly anticipated and well-deserved summer vacation, even if it is hard this year to travel around. But spending some time with your parents is also very important and you should use this opportunity to do that. Sadly, we could not host

a member's weekend to finish the academic year, but I am sure that we will catch this up next year.

The. Relationship with our fellow SBE association SCOPE has improved a lot this year. We are finally close to a solution that fits all sides: SBE, SCOPE and us. Since this is not finalized yet this is going to be the first task of my successor.

Before I wrap up, I want to say thank you. First of all, thanks to all our members. Without you we would be nothing and your great participation means a lot to me and my fellow board members. Thanks to all active members. No matter in which committee you were in, you all guys did a great job. Thanks to Tobi for over-taking this massive task of being responsible for the activities. I think I can speak for all of us when I say that you saved us. And of course, a big thanks to my boardies. Only you guys made it possible that we are where we are right now. You guys did a very good job and I am proud to be part of the SCOPE | Vectum board with you.

I would like to wish the new board all the best of luck in their coming year! We have great confidence in you, and we hope that you will be able to achieve all your goals.

I wish you all a great summer and I hope to see as many of you as possible next year.

Goodbye!



Tobias Bechthold – President SCOPE | Vectum 2019-2020



SCOPE | Vectum Board 2019-2020

President - Fredrick Hagelstein



My name is Frederick Hagelstein and I am honoured, grateful, and excited to be the proposed President of the 26th Board of Scope | Vectum for the 2020-2021 academic year. I am 23 years old, half Filipino, half German, and was born on the Isle of Man. My time at Maastricht University began in September 2016 when I started the bachelor's programme in Econometrics & Operations Research. Ever since then, you could find me at the Tuesday evening activities of Vectum. During the 2019-2020 academic year, I was on exchange at National Taiwan University in Taipei in the fall semester and then spent the spring semester doing an OR-related internship at the logistics department of an NGO in the Philippines. Therefore, I have not yet met the first year students who started in September 2019. To our newest members, I look forward to returning to Maastricht and getting to know each of you as my fellow students and peers in the Vectum community.

As President, I will be responsible for representing our members' interests towards the different stakeholders in our association, such as the SBE management, our professors in the KE Department, other student-led organizations, and the LOES, which is the national union of Econometrics student associations in the Netherlands. Additionally, I will be the chair at board meetings and oversee the day-to-day and behind-the-scenes work of our association in support of my fellow board members. Under our board's supervision, Vectum will continue to contribute to the university experience of Econometrics & Operations Research students at UM by hosting academic, career-related, and recreational events. On top of that, I aspire to be someone that my fellow Vectum members can confide in and trust, no matter if you are a new bachelor's student or a (pre-)master's student or doing your PhD.

Vice President - Edwin van der Vegt



Hello, my name is Edwin van der Vegt and I feel honoured to be the proposed vice president and external affairs coordinator for the academic year 2020-2021. For those who don't know me yet, here is a little background information about myself. I'm 24 years old, half Dutch half Brazilian and was born in Germany, where I lived until adulthood before coming to Maastricht. I love it so much here that I'm going into my 7th year now. As things should be, I went on exchange in my third year, to Charles University in Prague specifically. I liked it almost as much as being in Maastricht, so I went on another one at Bern University in Switzerland the year after. The next year I took a detour to DKE, but it was not something for me and I quickly found my way home again. Currently I'm doing my master's in Econometrics and Operations Research and will finish next year, truly for real this time. :)

As external affairs coordinator, I will be responsible for Vectum's relations with our corporate partners. I look forward to working with companies that are directly involved in applying what we learn in the real world and will do my best to represent Vectum in a professional manner towards them. Due to the awful economic and social uncertainty, the main challenge will be in maintaining the usual level of sponsorship. I am excited to work together with a team of talented creative econometricians to figure out and implement new and more effective ways of raising funds for the activities that make Vectum what it is. Much of this will be traversing uncharted territory, so for each idea its success is very much up in the air. Each of these, successful or not, will allow us to grow in experience and character as individuals, but also Vectum as a whole. As a lot of the work will be done during the summer, do not hesitate to contact me early if you're interested in being part of the external affairs committee or have any hints, ideas, advice you feel I should know about. You can contact me via: vice-president@scope-vectum.nl

Secretary - Joshua Vink



Hello! You must be very curious who I am? Well, I'm going to take you on a small trip on the Joshua train. I come from a small quaint town in the Netherlands, called Kerkdriel. I grew up with my parents, one of which comes from the UK (Poole) and the other from Schiedam. They met in 1985 at a local disco in England, and from there on out it's ancient history. Up until 1999, that's the year where a small miracle was born, me! Skip forward a few years and we're in 2017, my first year of university. This is also the year where I met the lovely family that Vectum is. I grew very fond of this friendly group of people, so much so that applied to become board in 2018.

An alert observer might have figured out that this is the second time that I'm in the board, that just shows how dedicated and appreciative I am towards Vectum. My first time in the board I was the Head of Internal Affairs. But now as you might have figured out, I'm the secretary and the head of public relations. That means I take the minutes of meetings and I keep everyone updated with the current affairs of vectum, like where an activity will take place or provide you guys with a neat magazine called the Per Vectum. I'm also the one who you can contact for any general questions or enquiries. Hit me up on secretary@scope-vectum.nl or any of our social medias, like Instagram, Facebook or Whatsapp. I also love to hear any ideas or general feedback regarding anything of Vectum!

Treasurer - Alexander Noordman



I am Alexander Noordman, a soon to be master student here at SBE. I am Dutch, German, and a bit Egyptian. In the past, I have lived in many parts of the world including Asia, South America, and Europe. I arrived in Maastricht in 2017 and have since been very involved in Vectum. As my time at SBE is slowly coming to an end, I wanted to give back to the Vectum community by being the treasurer for the 2020-2021 academic year. I will be in charge of the finances, and the weekly events we all know and love as well as members weekend. Luckily I will not have to do all this alone as the summer committee and activities committee will help throughout the year.

I am sure that despite the difficult time we are currently in, we as a board can give back to the Vectum community and bring many happy memories to all. Feel free to contact me at treasurer@scope-vectum.nl for any questions regarding my role or ideas.

We wish all the best to the new SCOPE | Vectum Board!

TRUE STORY: Interview With A Patient in Hospital During Quarantine

Japhlet Mputeni

Could you share with the readers what happened?

A day before Mother's day I had the 'honour' to experience how covid-19 is dealt with at the frontline: a hospital. The spread of the pandemic was reducing (in the Netherlands) at that stage, but it was still a surreal experience. I woke up with serious stomach aches which did not disappear throughout the day. I decided to call the nightcare. Before entering the hospital, the assistant on the phone asked corona related questions. Do you have a cough? Shortness of breath? Pain in your chest? etc. One is not allowed to enter the public part of the hospital if 'yes' is the answer to any of these questions. Luckily, I did not have any symptoms. After some tests, I was diagnosed with appendicitis.

What measures were taken to prevent the spread of covid-19 during your stay?

When my mother and I entered the hospital, we were first expected to disinfect our hands. I thought I'd be going home the same day. They then repeated the corona related questions. Afterwards, I was allowed to go to the nightcare, but my mother was not. Only patients are admitted in order to reduce the spread. Furthermore, in the waiting room you must sit five seats apart. The receptionists sit behind plexiglass. You neither shake hands with the doctor, nor do they ever get closer than 2 metres.

When the doctor suspected appendicitis I was sent to the SEH (emergency). I had to quickly email my professor that I wouldn't be able to hand in that assignment after all. Since it was not sure yet that I did not have corona, I was placed in a private room. My room was a children's covid-19 room. Why did they choose for a children's room? I honestly do not know. I saw that 'normal' rooms were available as well, but I guess I just look young :). The room was decorated with balloons and I cannot deny that I secretly liked that.

After some tests, it was indeed confirmed that I suffered from appendicitis. Still, they needed to test me for covid-19. The CT-scan showed that my lungs were clean making it highly unlikely that I was infected. If I were infected, I could not get surgery as this implied that the virus could easily spread to the doctors, nurses and to the next patient. This would have meant that I would have to stay in the hospital for a long time. You can imagine that I was really relieved that I was not diagnosed with the novel coronavirus.

Do you have any remarks on the measures taken?

The measures taken were very strict and sometimes even confusing. While staying in my room I did not have to wear a face mask and the nurses did not as well. After my surgery, the nurses brought me to the surgical department. As soon as we left the room, the nurses were obliged to wear a mask whereas I was not. No one really understood why this rule existed.

What were the nurses who cared for you like?

The nurses were very patient. I asked several nurses if it was very busy during the crisis. They said it was doable mainly because the hospital coordinated the situation well (I guess this confirms the importance of Operations Research). Once regular care is started again, they said it will probably be busier than before. I remember an encounter with a nurse as I was laying on the operating table. The surgery was about to start, and I was going to go under anesthesia. We were having a friendly conversation and she told me that her daughter wanted to study econometrics as well. I thought this was quite a nice coincidence. I fell asleep to the comfort of knowing how friendly the staff is and that I was in good hands.

If you could send a message to the nurses in the pandemic what would you want to tell them?

I'd like to send a big thank you to all the nurses who cared for me. I wish them all the best of luck as it gets busier in the hospitals.

What did you take away from this experience?

Some practical things that I learned are that you are only allowed to enter the hospital if you have serious medical conditions. Moreover, you may not be accompanied. In the unlikely event that you have to stay for a longer period of time, it is allowed that someone brings you whatever you need. It was hard that I was not allowed to see anyone, especially on Mother's day. However, with the help of 21st century technology you are closer than ever to the ones you love.

Thank you for the interview. Wishing you a speedy recovery!.

Keeping up with the Internationals

The announcement of the lockdown on the 14th March influenced a lot of international students to go back to their home countries. The fact that the education was being continued online also meant that everyone could work remotely. However, this did not stop our beloved study association from keeping in touch with their members. This segment features interviews with some of our internationals who went back home during this quarantine season. We contacted them and asked how the pandemic affected their lives and about their transition to online learning. We hope you enjoy these interviews.



Quarantine Interview with Clemence

Radina Andreeva

Vectum reached one of our firsties, currently living 10 453 km away from Maastricht. Meet Clemence Chia, a fellow committee member (but on the External Affairs committee) who is also involved in other university associations, besides being an EOR student. In the free time he has left, he enjoys playing video games and watching anime.

Can you introduce yourself, where are you from and where do you currently reside in?

Hello! I am Clemence, first year econometrician. I come from the lion city, Singapore. Currently residing at home due to the COVID-19 fiasco.

How has your country dealt with the coronavirus and how has it been different from the Dutch strategy?

Not sure how the Netherlands has been dealing with the coronavirus, but in Singapore, it is mandatory to wear a mask before leaving your home. Non-compliance will result in a \$300 (190 euro) fine. In addition, all gatherings are banned, most shops are closed (even McDonalds!) And only essential services are to remain open. As of 2nd June, Singapore has begun their exit strategies but will take a while for the economy to turn upwards.

How would you describe your first year as an EOR student?

First year was fun, lots of theories and concepts to remember. But once you get the hang of it, it all boils down to how you apply them (from second year onwards).

Do you like the way the university has handled the crisis?

I am indifferent to how the university is handling the crisis, since it is based on the Dutch Government's criteria. Although I did like the safe distancing practice video they released.

How has your learning process been changed? Do you find it easier or harder than before?

Learning is now conducted online on zoom and lessons are accommodated to every student worldwide. Singapore being 6 hours ahead of Maastricht, I was able to request for “morning” classes to fit my schedule better. Online lessons make clarifications more difficult; and demand more from students to produce assignments and such, but the exams are definitely easier since students have access to more resources.

Have you found it difficult to keep in touch with your Vectum/EOR friends? What was your favorite event of the (short) year?

Sometimes, the time difference means I can participate in VECTUM activities for an hour or so since it begins at 1am Singapore time. But communication isn't really a problem since skype and discord are readily available. My favourite activity was the VECTUM Challenge as it was the first step VECTUM has taken to bond their members despite the lack of social gatherings, congrats to the winner, Joshua!

How do you think the pandemic will affect our society and future ?

This year would be definitely be etched into history books as calamity after calamity befalls it. Unemployment is now at an all-time high because of the corona virus, so the economy will take a while to recover. The medical sector will be working in overdrive to create a vaccine against the highly contagious coronavirus so kudos to them. In addition, there might be slight prejudice against Asians because of the origin of the virus. Just some things I listed from the top of my head.

What are your plans for the next study year?

Depends on the announcement on when physical classes will resume. After which, survive the second year.

Thank you for the interview, Clemence!

Quarantine Interview with Alexandra

Japhlet Mputeni

How would you introduce yourself to those who want to know a bit about you?

Hi! My name is Aleksandra. I'm a second year Econometrics student from Lithuania. My country is small enough that whenever I say where I'm from, I'm usually met with confused looks haha. I'm quite proud to be Lithuanian. Knowing that less than 3 million people know the language makes it quite special to me. After lockdown, I'm looking forward to eating on the terraces of my city Vilnius. Most restaurants have opened again and the city centre was cleared so that restaurants could set their table according to the corona guidelines. The city square is like one big terrace.

Where are you staying now? What influenced your decision to stay there during quarantine?

I'm currently staying in Maastricht with my partner of three years, Lucas. Three factors influenced my decision to stay in Maastricht. At the time the lockdown started the Period 4 exams were fast approaching. I knew that I would find it hard to concentrate on school in my home country with my old friends, my family and my favorite cat being easily accessible. Secondly, I would have needed to do a two-week self-isolation upon arrival and hope that I didn't catch the virus during my travels. Thirdly, my housing contract in Maastricht

had a couple of months left to it and so in the end staying in Maastricht was the better option for me.

What was the best day of your quarantine?

There was a day that had a stressful start but ultimately turned into the best day of the whole quarantine period. My housemates had all gone to their family homes for quarantine. I had an assignment which I had already started working on that was due on Sunday evening. Lucas and I had set out to go to the Albert Heijn on Friday evening for a quick errand run. As the door closed behind me, I double checked my bundle of keys and realized our problem. My house keys were not on my usual bundle of keys. I had removed my house keys from the bundle when taking a stroll earlier that day. We were officially locked out with no phones and no laptops. Luckily, Lucas had brought his backpack to pack the supplies from the store. Inside the backpack he had his wallet and the keys to his own apartment. We arrived at his apartment two hours later. It took much longer than pre-lockdown travels due to the bus shifts having changed during lockdown. At the apartment, we were able to borrow his housemate's laptop so that I could get into contact with my landlady via Facebook. Since most of our belongings were in my apartment, we camped out in his apartment with little supplies. The landlady replied the following day to say that she'd only be able to open my door at 4pm. When her mes-

sage came in, I realized that this situation was out of my hands. I could have beaten myself up about taking the wrong bundle of keys but I realized that the situation had passed. I woke up stressing about the limited time I had to work on the assignment but throughout the day was 'forced' to have a relaxation day. There was no listening to music or watching videos to calm me down since our laptops and phones were locked in. Lucas and I spent the day playing cards and it is my most cherished memory of quarantine. We found calmness in the madness. When it was time to meet up with the landlady, I speed walked a walk, which according to google maps would take an hour and a half, in 50 minutes. As much as I had found peace with the situation, I did want to get cracking on that assignment. Ultimately, I was able to work on the project and my teammate and I handed in a paper that we're proud of. By keeping calm, I was still able to enjoy an off-the-grid Saturday morning and afternoon and meet the deadline despite the unfortunate circumstances.

What did you do in your free time?

When I wasn't preparing for tutorials and exams, I followed Youtube exercise videos and I saw some great movies: Beautiful Mind, the Schindler's List and The Greenbook. Halfway through the quarantine I started experimenting in making healthy, vegetarian meals. My favorite creation so far was made by baking a sweet potato in the oven. I fried chickpeas and prepared spinach with sundried tomatoes and onions. The chickpea mixture I put in the middle of the sweet potato and lastly topped it all off with feta and basil.



How did transitioning to online schoolwork for you? Did you face any challenges?

I wouldn't say I faced many challenges. It was an adjustment to work from home and not have the SBE and the library as open study spaces. I did miss the face-to-face interaction between tutor and tutee, especially when a question was being answered but, in the end, I got the hang of it.

If another quarantine were to start, what would you tell anybody going into it?

I would recommend anybody going into it to follow the hygiene guidelines and take the social distance rules seriously in order to not only take care of yourself but also protect the risk groups of our society. Quarantine was an unexpected event. COVID-19 and the quarantine were outside of our control and it was understandably upsetting to not be able to see family or feel any certainty about the future. I'd advise anyone, including my pre-quarantine self, to take it a day at a time and not worry too much about things outside of your control.

Thank you for the interview, Alexandra!

Quarantine Interview with an Anonymous E&OR International

Nhi Nguyn

Hi, can you tell me a bit more about yourself?

Hi, I am currently a second year Econometrics and Operations Research. I am turning 21 this August and I am from Vietnam.

Why did you choose to stay in The Netherlands instead of going back to your home country?

Before the outbreak of corona virus, I have booked the ticket to go back in July and I could not change that ticket. Moreover, my family and I all agreed that going back home this time is more dangerous because in the airport or plane, there would be crowded and the chance of getting corona is higher.

Is this time different from your daily life before?

It could be a strange thing to say, but this time is not so much different from my daily life before. It is just now I do not need to go to school and have more free time, but I do not feel so much different.

What have you been doing during this lockdown?

During this time, besides the time we all need to watch lectures, go to online tutorials, I watch YouTube videos and some Korean TV shows and online concerts from my favourite music band because I am interested in Korean culture. I also spend more time calling my parents in my home country. Talking to them is one of the ways to help me relax after all the intensive study.

Has the quarantine caused you any trouble?

It was just for the first few days of the lockdown, I could not buy any bread/flour because people were stacking up those things. However, besides that, I have not got into any serious trouble.

Have you had any trouble in studying online?

For me, studying online is not a big problem. The only trouble so far I have got is doing exams online. In my opinion, either typing answers on computer or writing things down and scanning them seems to be more complicated than just handing my answers to the examiners in the MECC. Moreover, I also prefer reading the questions on paper more than having them online.

Can you share some tips to concentrate when working from home?

I think everyone has their own way to study effectively. For me, I never listen to music when I am studying because I can easily be distracted by the music. I also read the slides before each lecture and tutorial so I can be more well-prepared. For the exams, I just do as many previous exams as possible so I can get used to the structure of the exam and it is also the way I revise what I have learned so far.

What do you want to do when the quarantine is completely over?

I am looking forward to going back to my home country - Vietnam to spend my summer holiday there. I also hope that I can travel and experience more after this lockdown.

Thank you for the interview!

Online Teaching Talks with Professor Alain Hecq

Marie Corillon

On March 15th, Maastricht University announced the beginning of distance learning, which would continue until the end of the year. As we know, this decision brought major changes regarding students' way of learning. However, we shouldn't forget that distance education also greatly impacted the teaching staff. We therefore decided to interview one of our professors in order to understand the challenge that this alternative way of teaching represents for them.

Alain Hecq, researcher and professor of Applied Econometrics at the Quantitative Economics Department, kindly accepted to share with us his experience of online teaching by answering some questions regarding the different aspects of his job that have been affected throughout the crisis. First of all, Professor Hecq discussed

the difficulties he encountered during the transition to distance education. He explained that the biggest challenge had been to react almost instantly to the decision of ceasing "face-to-face" tutorials and lectures, and to adapt his courses with very little information concerning the procedures to follow or the tools to use. For instance, Blackboard Collaborate had many issues and the use of Zoom wasn't as widespread as it is today.

Adapting courses in such short notice and finding the optimal way to give courses online takes time on different levels. The preparation of a two-hour tutorial could take up to two days and the course structure also had to be changed, just like the exams, cases and papers students had to work on. Giving online lectures is not an easy task either. Not only talking alone to a screen can be hard and tiring, but making them also takes time, from the actual recording and mp4 conversion to the publication on Mediasite and the waiting time to obtain the Zoom links, which can take hours. Altogether, online teaching takes him twice the time to prepare than what it usually would. Unfortunately, teaching isn't the only aspect of Professor Hecq's job that has been affected during this quarantine. He misses meeting with his colleagues, either to talk about their researches or even just



to chat over coffee. All the scientific congresses he was supposed to attend all over the world (in London, the US, Cyprus, Rome, Saragossa, Marseille, Rio and Mallorca) were cancelled and he was unable to meet his co-authors to work on their common projects. Following the progress of his PhD students is also more difficult to do online.

Finally, even though distance education has flaws, it still has some positive features such as not having to spend almost two hours in a car every day just to come to work, or the possibility for students to watch lectures at times that suit them best, which probably increased the attendance rate. This last aspect would actually be interesting to implement in traditional teaching since it would allow professors to record lectures in advance in case they cannot be physically present to give them, and would allow students to re-watch them later. Furthermore, he was pleasantly surprised to see that the students attending the Zoom tutorials, which were not compulsory, were still very motivated and serious about their work.

In conclusion, the disadvantages of distance learning indisputably outweigh its advantages. It is more time-consuming and the lack of interaction with students and colleagues turned out to be really frustrating, and although in my opinion Professor Hecq did an amazing job at adapting his courses, the transition forced him to sacrifice time he would have spent otherwise on his other professional activities, which is clearly not optimal in the long-run.

We would like to thank Professor Hecq for participating in our interview, which helped us realise that online education is a real challenge for everyone, on social and professional/educational levels, and we also would like to thank the whole teaching staff and UM employees for the work and effort they put in during the last few months.



Interview with our Beloved Probability Theory Tutor

Tom McGrath

Yincong Lin is a PHD candidate who has been studying and teaching here in Maastricht for the last 6 years. Unfortunately, he will be leaving us at the end of this year as he has been offered a job at Vrije Universiteit Amsterdam.

Tell us a bit about yourself? Where are you from? Where did you do your bachelor and masters and what did you study?

My name is Yincong Lin and I'm currently a Ph.D. candidate in Econometrics at the department of Quantitative Economics. I was born and raised in Shenzhen. Shenzhen is one of the biggest and also youngest cities in southern China. Before coming to the Netherlands, I had spent most of life in Shenzhen. I obtained my bachelor degree in Mathematics and Economics at Shenzhen University and I remained there for another year to pursue a masters in Mathematical Statistics.

Why did you choose to come to Maastricht University?

There are three main reasons. Firstly, it's because of the city. While I was in China, I had always imagined myself studying in a historic city with a rich heritage and culture in Europe, it had to be a European city. When googling photos of Maastricht, I was immediately drawn to the beautiful scenery. After six years of living here, I can say



I'm still deeply in love with the city. Secondly, UM offered me a full scholarship for two years. Thirdly, SBE provides courses in both Econometrics and Neuroeconomics. At the time I was really interested in neuroeconomics and had read many papers by Ernst Fehr during my undergraduate study.

Why did you decide to do a PHD?

Hmmm, I never gave it much thought it just happened naturally.

Tom: What are your favourite areas in the field of mathematics?

Yincong: Based on my limited experience and knowledge, I found topology, complex analysis and saddle point approximation theory all extremely elegant. Along with measure theory and chaos theory. My bedside books are mostly related to these fields.

What are your interests outside of mathematics? Are there other fields which interest you?

To name a few, Linguistic Philosophy (Ludwig Wittgenstein), Literary Naturalism (Henry Beston), Aesthetics (Zehou Li).

What do you do when you're not teaching/researching? What are your hobbies and interests?

Mainly painting, reading, travelling and chatting with friends about meaningless things. I love folk songs from different countries, because of this, I collect albums of local musicians whenever I travel to a new place.

Where are you going next year?

I will be joining the Department of Econometrics and Data Science at Vrije Universiteit Amsterdam.

What will you be doing next year?

The same as this year.

What are your highlights from your time here in Maastricht?

Hmm, none come to mind right now but probably once winning the Econometrics Game(S)

What are your 3 most helpful tips you'd pass on to younger students who are studying Econometrics and Operations Research?

I actually have no tips. I also think there

won't be any universal tips that are helpful for every student. You will need to figure out the most suitable way for yourself. From my own experiences, there are several things I find useful.

1. Following lectures and taking notes by hand. Personally, I find following lectures is always the most effective way to learn new knowledge. Note taking forces me to think.

2. I never set myself the goal of achieving good grades in exams. I simply enjoy the courses and good grades just fall upon me, luckily! Obtaining good or excellent grades is very beneficial however as it has allowed me to receive many unexpected opportunities.

3. I always choose the difficult courses but that look interesting to me, whether or not if I know they're useful. Take challenging mathematical courses from other universities when you have the chance on exchange.

We wish Yicong success in the rest of his career and thank him for his effort contribution to Econometrics and Operations research students over the years.



One of Yicong's paintings

A Challenger Has Arrived: Virtual Vectum Challenges

Tobias Breuer

With the corona outbreak thwarting our activity plans at the beginning of March, we were forced to cancel numerous activities, like the Pub Quiz with Actuariel Instituut or the beloved Beer & Wine Tasting. The Activities Committee's creative minds were working at full stretch to come up with fun ideas to keep our members occupied and having fun. After a few days, we had the idea: a series of creative, mathematical and fun challenges to earn points over two weeks, with a winner and a prize at the end! A task force was quickly formed, a Challenge Master appointed, and plans made. The Challenge Master's identity was not to be revealed under any circumstance.

When all the logistics were worked out, the Challenge Master began the roll-out of challenges on May 4th, with the first task asking to create a picture of a fellow Vectum member. Drawings, collages and other visual representations were accepted. All submissions were beautiful works of art, and the first points were awarded to the participants.



Staying in the visual area, the second challenge asked to photoshop yourself as your biggest hero; this could have been a politician, movie character, one of your parents or your best friend. Fred as Mia Wallace from Pulp Fiction and Kristina as Donald Trump scored highest in this one. For the third challenge, participants had to play detective, and find clues to prime numbers hidden in a picture of a short text. No problem for the natural detective Joshua! Having found the most prime numbers in the clue, many of which were not even purposely placed there, he won this third challenge with flying colours. The following challenges were "The Lover", where Kristina wrote a heart-touching declara-

tion of her love for bacon, and “The Chef”, where Clemence prepared a mouth-watering honey-glazed salmon, with accompanying recipe. This marked the end of the first week of challenges, and the Challenge Master dismissed us into the weekend.

On Monday, the next challenge arrived our mailboxes punctual as ever; four different ciphers to crack! Each standing for the name of one of four well-known professors we have encountered, this task proved to be a breaking point for some participants (yours truly). Others prevailed though, with Kristina working out one of the more complex cyphers correctly by hand. Props! The next challenge allowed us to reflect on our “Personal Growth”, and to reconstruct a picture from our childhood.



I am happy I learned that bangs do not look good on me other than maybe in this picture



I am happy I learned how to dress myself and don't need to wear those frog-coloured pants anymore.



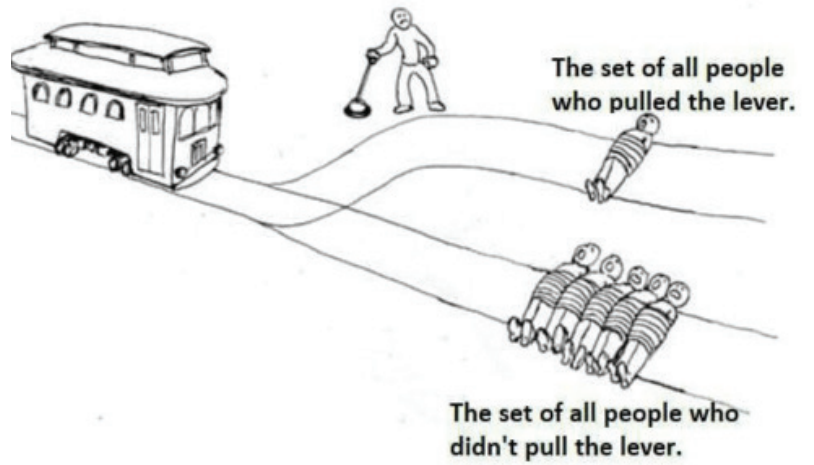
The thing that I'm glad that I've learnt since the picture has been taken, is that I'm capable of thinking ahead a bit more as so not to get my head stuck in literal and figurative matters.

As the last challenge, the Challenge Master asked to produce a piece of code so useless “that no human, computer or AI entity would ever find it useful.” Joshua again went all out on this challenge, creating a full-fledged website with lots of subsites, all in all, a complete waste of time of every visitor.

Concluding this exciting week of daily challenges, the Challenge Master hosted a Zoom meeting in which her identity was revealed: it was Izzy all along! After a complete presentation of the best submissions, everyone fell silent. It was time to announce the winners. The moment we had all been waiting for. Coming in third, with 60 points, it's me, Tobi! Coming in second with 64 points, Kristina! And coming in with a record-breaking 67 points, Joshua, who is now the proud owner of the official one-of-a-kind “Virtual Vectum Challenge Winner 2020” shirt!

And that concluded the first Virtual Vectum Challenges. From all of us participants, I'd like to thank Izzy for being the Challenge Master, sending out challenges, collecting submissions and designing an awesome shirt for these two weeks, allowing us to have this much fun!

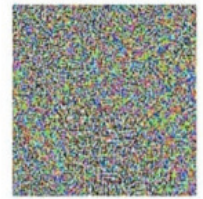
Econometrics Memes



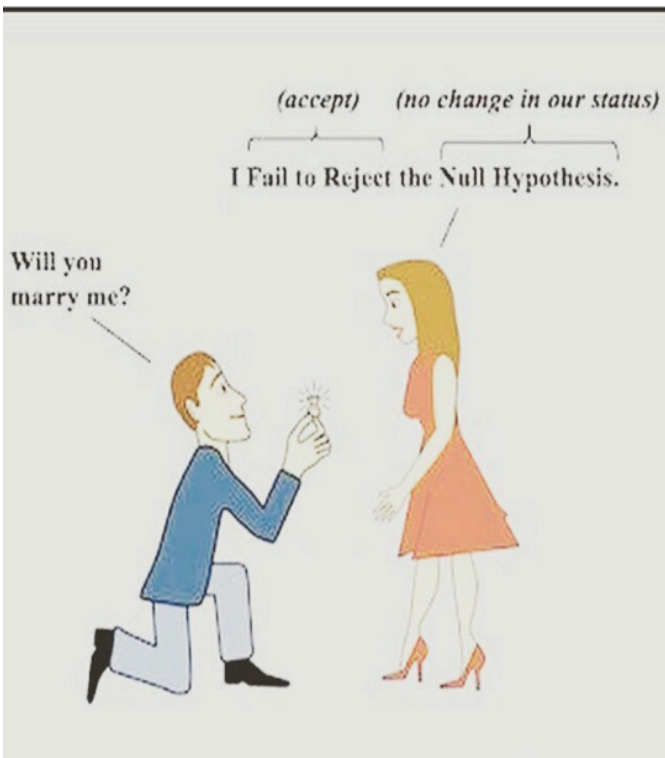
WHO WOULD WIN?



STATE OF THE ART NEURAL NETWORK



ONE NOISY BOI



Me and the boys preparing to solve an analysis problem





Welcome to the USA - Exchange Article by Ofek

OFEK SVERDLOV

“Welcome to the USA!” – I distinctly remember the pilot saying this as the plane landed in what was going to be my home for the next few months. The United States of America – The land of the free – The US of A – No matter what name you used, one thing was for sure; this was going to be quite the adventure. My journey to the US actually started a few months earlier, with the filling in of exchange preferences. I knew I wanted to go somewhere they spoke English outside of Europe, the US being an obvious choice. Once I knew I wanted to go to the US, there was the matter of selecting which university I wanted to attend. Considering the beaches, amazing weather and notoriously “chill” vibe, California became an obvious choice. With that in mind, I quickly found myself putting the UC (University of California) system as my first choice. Unfortunately, unlike literally all other universities, the application process to California involves several steps, including forms and letters of motivation, and took me a good few weeks to complete. Long story short, I learned in the middle of march that I was going to go to UC Santa Barbara.



UCSB starts its semester surprisingly late (end of September), and while I had been to the US before, I had never gotten to really see the West Coast. I got in contact with some friends

living in the area, and with that made a small itinerary of all the places I'd go visit before the semester started. My journey began in Seattle, Washington, where I was going to stay with a friend for a little over a week. Seattle is a gorgeous city that lies on a waterfront, with some amazing skyscrapers combined with the cool breeze of the bay. I spent the next few days acting like a complete tourist, visiting all the highlights; from taking a boat trip in the bay to visiting Pike Market in downtown Seattle.



After spending a few days in the large metropolitan Seattle, I joined my friend on a road trip down to Oregon. My first time experiencing a real culture shock in the US happened on this trip, where what my friend had described as a “short road-trip” ended up taking over 7 hours. That being said, this was really a chance for me to get a good look into the diversity and sheer scale of the US, moving from a large metropolitan city to the beautiful nature countryside. I spent the next few days experiencing the “quintessential US lifestyle”; we had barbecues, played golf and watched had smores. I also got to visit the nearby Carter Lake, which was a real sight to behold. With a small taste of the US lifestyle in mind, I said my farewell to my friend and started the next part of my journey; traveling to Colorado.



My first weeks in the US were spent very strategically moving between friends who lived in nearby states to California, mostly so that I didn't have to spend any money on housing while I travelled. I got to spend a week in Colorado, visiting Denver and some of the nearby national parks. This was a fun time travelling for me, getting to see some awesome sights and relaxing, while friends back home were complaining about their studies. The traveling part of my journey finally came to an end as I boarded a plane from Denver to Los Angeles.



A little about UCSB: Santa Barbara is a beach city about 2 hours north of LA, with UCSB actually being located about a 20 minute's drive further. UCSB is often called a beach campus, with two the university actually having two beaches on its campuses. This meant it was very common for people to go surfing before

classes and showing up in flipflops, or even getting to have an ocean view from inside your tutorial. UCSB is a great place to really experience real US college lifestyle. UCSB is situated in a college town (Isla Vista), and so everything is tailored for students. The weather in UCSB is great, so you can basically go swimming every day. Moreover, the college has just about every sport available in some capacity, so you should find more than enough to do during your exchange.

UCSB also has a reputation for being a real party school, a reputation that is defiantly warranted. People were throwing house parties and beach parties nearly every day, even during exam week!



While I choose UCSB to try to experience the US college lifestyle, I still had to take enough credits in order to pass my exchange. I ended up enrolling in five classes while at UCSB, two economics, two computer science and one sport class. Yup, UCSB allows its students to take sport classes for credits. I ended up taking Advanced Basketball, and while SBE (rightfully) didn't award me any credits for it, it was still a blast to take. The courses in the US are all curved to ensure the majority of the class passes. This makes it hard to score really well on exams, but also hard to fail. As an exchange student taking all my classes pass/fail, this

proved to be an excellent system, allowing me to pass all my classes with minimal effort.

I spent the majority of my time at USCB making new friends and travelling across California. I was lucky enough to become friends with a group of exchange and local students who all wanted to travel to. We ended up travelling to all edges of California, so much so that in the month of November I spent more time travelling than in UCSB. My first trip after arriving at UCSB was to the nearby Yosemite National Park. Note that it was nearby for US standards, still requiring a good six-hour drive. Yosemite was stunning; the combination of amazing mountains together with the forests and clear skies made this trip really one to remember.



Having gotten a taste of the natural beauty of the US, I quickly became determined to travel again soon after getting back. After attending UCSB for a little over a month, I decided it was finally time to properly explore LA. LA, while being a bit too touristy for my liking, was a beautiful city to explore. LA simply had so much to offer, from nature hikes, to the beach, all the way to trendy dining spots. I only ended up visiting LA for a few days, but it was definitely worth the visit, even if only to take the typical tourist photo on Hollywood Boulevard.

Being an exchange student with very few responsibilities made planning trips extremely easy and fun, and over the course of the next few weeks in the US I ended up getting to visit

the Grand Canyon, Las Vegas, Austin and even Pittsburgh. The highlight of all these travels as getting to spend Thanksgiving week in Canada, which towards late November had become a winter wonderland. -16 degrees meant not many tourists were exploring the national parks of Canada; making the experience of seeing a snowy mountainous landscape all the more beautiful.



I got to see and experience so much during my travels in North America, from exploring the different cultures to exploring different stunning National Parks. My exchange semester has become the highlight of my university experience, and I definitely recommend everyone make the most of their exchange, wherever they may go. Don't be scared to travel and explore, and most importantly be open and make friends. Sitting in my room back in Maastricht writing this makes me look back to all the good memories I got to make. While I am sad the exchange semester ended so quick, there was something about knowing it was temporary that made it all the more fun. Be open, take the first steps, and visit the US for your exchange semester!



Staycation - The Ultimate Stay at Home Vacation Guide

Rebecca Walter

Have all your summer plans been cancelled due to Corona? We are so sorry to hear that! You worry that you will get bored for a long time? No need to! Here are some tips and tricks on how to make your time in Maastricht (or anywhere else) an amazing Staycation and an unforgettable summer.

1. Take yourself a bottle of wine or beer (or any preferred beverage) and have a drink with a friend or two at St. Pietersberg. Especially on a warm summer night, sunsets from there are amazing to watch and will definitely be worth the walk up the hill. If you want to make it more of an epic memory, you can also turn this experience into a romantic picnic. Take your favourite snacks with you and make this night into a date night. If you feel kind of lazy and don't want to climb up all the way of Sint Pietersberg, there are a lot of other nice spots to sit down in and relax. For example there are some super nice spots along the Maas close to the Bonnefantenmuseum.



2. Do you have a garden or a balcony? Then get yourself a small pool, fill it with water and have a good time under the sun on a hot summer day while cooling off. But keep in mind that the day after will not be that much fun if you do not protect your skin and forget to apply sunscreen. Turn up the music and have a little pool party with your fellow roommates, friends or family.

3. Is it so hot that you cannot think anymore? And you really need to find a way to cool down? Then making some Popsicles yourself will be the perfect relief. All you have to do is get some popsicle jars, fill them with your favourite juice, put them in the freezer and all you are left to do is wait until you can enjoy them. For some more creative minds, here is a link to some fancier homemade fruit popsicles:

<https://www.jessicagavin.com/make-your-own-homemade-fruit-popsicles/>

4. If you suddenly have some more money left because you do not have to pay for any expensive textbooks. Especially for the girls it might be inviting to take a trip into

the city. Particularly, the small streets in Maastricht's inner city are having a charming atmosphere which makes any shopping trip a nice experience! Just be careful that on a beautiful day the city might be packed with many tourists also wanting to grasp some of that lovely ambience.

5. Another way to use your time and the exceptional warm and sunny weather in Maastricht wisely, is to go on a walk or a bike trip. Either with a friend or just by yourself, you can explore Maastricht and maybe find some secret beautiful places around the city. The city has loads to offer, you can either go out into nature or stay around the city blocks in the heart of Maastricht. Especially, walks down or up the Maas are very recommendable and resemble the beautiful landscape of the area we all live in.

6. Have you ever had the time to explore some cities around Maastricht? No? Then this is the time for you to explore some of the great diversity of the area. With Maastricht being right at the border triangle between the Netherlands, Germany and Belgium you can even explore different countries (obviously only if the current guidelines/regulations will allow this and you feel comfortable doing so). If you want to stay within the Netherlands, recommendable spots are for sure Valkenburg or a trip to Roermond. Are you looking for a more diverse experience? Nice destinations for you will be Aachen (Germany) or Liege (Belgium). In these places you can practice your language skills in German and French and see some different cultures. You can also visit the three-border triangle in Vaals

which connects all three countries. It is easy to get there by bus. They even have fun activities there like a labyrinth that you must escape from. Just make sure to look up the corona rules and regulations for the different countries as they differ a bit depending on where you are.



7. No beachtime anymore? Don't you worry, we've got you covered. Luckily for us, the Netherlands are not that big and therefore a trip to the closest beach always sounds like a great idea. Just hop on the train (obviously make sure to wear a mask and to not infect yourself with Corona) and off you go.

Going there is almost like a mini-vacation.



8. Cooking together with friends always helps to change up the routine. There are various websites where you can get a lot of really nice recipes to try out. Sushi is always a really fun idea to make together as it takes a bit of time but is great to enjoy. If you do not feel like a big cooking project you could also just make something easier or if you are more on the sweet side, then a cake which you can enjoy together, is always a good idea.



9. If you are already exhausted from enjoying all the things suggested in the previous tips and tricks then we have another, more chill one for you. It doesn't matter if you have Netflix, Amazon Prime or only YouTube, having a film marathon alone or with a friend with some yummy snacks is never a bad idea. You can easily refuel your energy levels with this to get ready for the next fun activity. This is also the perfect activity for any rainy summer day.

10. Last but not least, it is not always important to go to the most exotic places or to do the most crazy/fancy activities. In the end, the most important thing is how you approach your summer and that you try to make the best out of everything. Of course it sucks if the summer vacation that you have been looking for had to be cancelled but you can still make it fun at home. Just call up some friends and try to get out of your normal routine. Because isn't that what makes vacationing so special in the end?

We hope these tips were helpful to give you more ideas for your free time. Keep in mind to respect all the regulations and restrictions implemented by the country that you are in and make sure to stick to them. So, hopefully we will all be able to go back to our normal routines soon! But for now, make the most out of the time you have and always live life to its fullest!! Also, we would love to receive photos of your summer activities. Because *did it really happen if you didn't document it?!*

XX, Stay healthy!

Quarantine Cooking: Cheesecake Recipe

Rebecca Walter

Cakes are always a good idea. Hence, for a little baking inspiration we will now give you a recipe for a cheesecake that you can follow along at home.

Ingredients for the base:

200g flour
100g sugar
1 tsp baking powder
1 packet vanilla sugar
1 egg
75g butter or margarine



Ingredients for the filling:

1kg Quark
1 cup of sugar
1 cup of oil
1 packet of vanilla sugar
2 eggs
1 tsp lemon juice
500ml milk
1 packet of vanilla pudding powder



Preparation:

Base:

All ingredients need to be mixed into a firm dough. $\frac{3}{4}$ of the dough needs to be put on the bottom of the springform pan. The rest of the dough should be put on the edge of the pan approximately up to 2 cm high.

Filling:

Also, here all ingredients need to be mixed. Afterwards, the mix can be poured onto the bottom of the springform pan. The cake then has to bake 55-65 minutes in the preheated oven with 200°C. If you want your cake to stay white on top you can add aluminium foil over the pan.

All you are left to do is to take it out of the oven and enjoy! Get some friends together and have a nice coffee with a lovely piece of cake!

As a small tip, the day after the cake tastes even *juicier*.

Farewell from the SCOPE | Vectum Board of 2019-2020



We wish all a relaxing summer, and thank you for an amazing board year!



*The SCOPE | Vectum Board of 2020-2021:
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