

# Aeroplane

VLAAMSE TECHNISCHE KRING

Monthly - Edition 4: March 2015



Developing your  
career skills



Hospital Robots



Citytrip to  
Brussels



Photos from  
De Afrekening

## Exploring Northern Leuven



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- 3** Esko Job Day in Ghent
- 3** Deloitte Workshop - Data Analytics and Information Management
- 3** Bitterball Eating Battle
- 3** Jungle Party @ 't Elixlr
- 5** ASML Lunch Lecture
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**More info on [vtk.be](http://vtk.be)**

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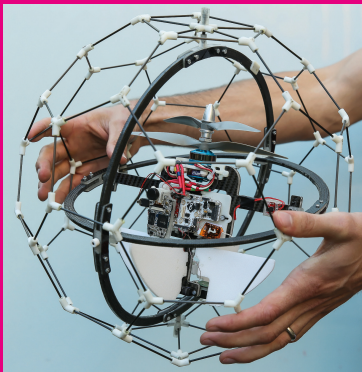
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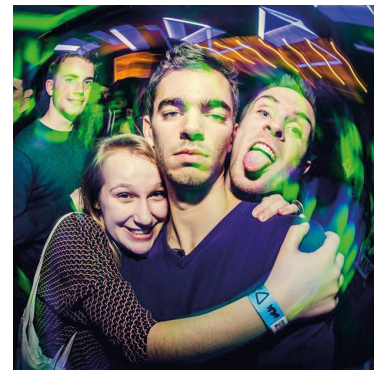
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# Word from the president

Dear internationals,

Second semester, and we're one month in already. A month that consisted of a lot of partying in my case and a bit of working as well of course. It's something I don't like to see happening because every week that passes, means a week closer to my thesis deadline and the end of my student life.

But I'm sure people won't read this if it's just to hear about what I've been up to. Let me tell you something more informational instead. What I would like to talk about, is the importance of the people you surround yourself with. It is a popular belief that you are the average of the five people you hang out with the most.

That's not what I wanted to say however, I wanted to stress the importance of mentors and mentees. Don't just surround yourself with people like you who are at the same level in everything. A third of the people around you should be a mentor for you, who is far ahead of you in some area of life, regardless of his or her age. This makes sense, you can learn a lot from someone like that.

Only a third should be peers, the other third should be mentees. People who can learn something off of you. Not just for the sake of them having mentors of their own, or because it makes you feel valuable. No, the benefit of having mentees, is that they are new and ready to start, so they are bursting with enthusiasm which will transfer on to you to keep you going.

How does this relate to our daily lives? Consider it as a wakeup call, because you are probably surrounding yourself with peers only. Of course you are, because you have classes with them and never work together with students of other years. The gap between students and professors and assistants is also fairly large.

It is more in your student life than through your courses that you can find opportunities to create these kind of relationships. For example there's the buddy system, VTK has volunteers, praesidium and graduates, ... look for it and you'll notice it everywhere. The opportunities to find mentors and mentees, to get inspired and motivated, are more abundant than you think, so go look for them.

I wish you the best of luck and lots of fun on your quest for the lessons that Leuven still has to teach you!

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# Galabal des Vlaamse Technische Brings

27.03.2015

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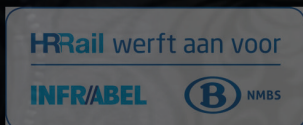
VVK: 14/18 EURO (L/NL)

ADD: 20 EURO

VVK@THEOKOT

0,01 EURO ERELEDEN

MORE INFORMATION: [VTK.BE/ON/GALABAL](http://VTK.BE/ON/GALABAL)





# CityTrip: Brussels

As the <Gopass 10> allows people under the age of 26 to travel anywhere in Belgium for only five euros, most of you will find it very easy to take a day off on the weekend and visit one of Belgium's beautiful cities. Every month, we'll give some practical information and background on one of these Belgian cities, and this month we'll give you a list of the highlights of Belgium's splendid capital: Brussels.



Of all the cities in Belgium, Brussels is probably the most difficult to summarize. Bruges, Antwerp, and Charleroi each have their distinct styles, but Brussels is a bit of a melting pot. There's the postmodern European district where the EU Headquarters is sited, there's the 20th century vibe you can pick up around the Atomium, and there's the historical inner city. And scattered all over the place are many neoclassical and Art Nouveau buildings for the architecture fans. It is impossible to list up all the things to see and do in Brussels, but we'll do our best to name the most important ones.

Many of Brussels' main sights are located near the city center, which is conveniently close to the central train station. On the Grand Place (Great Market) you can find the 15th

century town hall and guildhouses, most of which have been converted to cosy restaurants and bars. This square, which reminds us of the Great Market in Leuven, is the heart of the city and a vibrant place to be in the evening. Many of the city's sights are located close by, like Manneken Pis, the shopping center, and the Brussels Stock Exchange, founded by Napoleon himself. This is also the best part of the city for getting some really good Brussels Waffles.

If you leave the central station on the east side, away from the Grand Place, you are surrounded by some of the most magnificent buildings in Brussels. If you go north, you'll reach the gothic Cathedral of Saint Michael and Saint Gudula. If you go south, you'll find the museum of Fine Arts, which houses



an extensive collection of Flemish painters like Bruegel and Rubens. You can also find the Margritte Museum, dedicated entirely to the famous Belgian Surrealist. If you go south even further, you can see the Palace of Justice, a gigantic neoclassical building on the top of a hill. If you go east from the station however, you reach the Parc de Bruxelles, a park that is surrounded by federal buildings, like the Royal Palace and the Belgian Parliament.

Brussels is a multilingual city, partly because of the bilingual nature of Belgium's capital and partly because of the EU. If you head further into the eastern part of the city center, you'll reach the European quarter and notice that you hear a ton of different languages in the street, not just Dutch and French. This is also a very interesting neighborhood to walk around in, and it houses a lot of museums where you can easily spend a day. There's the European Parliament itself, the Natural History Museum, and the museums of Art History and the Army in Parc du Cinquanteaire. The Cinquanteaire itself is impressive all by itself, and is a good place for a lunch break in the grass on a sunny day.

People who aren't afraid of walking a little further can make their way to the Ato-



mium, arguably Brussels' most famous landmark. The construct represents one atomic unit cell of iron, and was built for the 1958 World Fair. Next to the Atomium there's Mini-Europe, a park where you can see miniatures of almost every famous landmark in Europe. Also near the Atomium is the palace of Laeken, the residence of the royal family.

With such a huge list of places to visit, it is convenient that Brussels is only ten minutes away by train. So if you're ever bored in the weekend, you can just go out and visit the capital, the way you enjoy it best.





# VTK Development, what's that?

*Students know VTK Corporate Relations as the people who bring them in touch with companies through the Jobfair, mails, and other media. They also help students in the last year of their bachelor's and first year of their master's program find internships on the Internship fair in November. Starting this year, VTK Corporate Relations also has a Development branch. Their activities will allow you to develop your corporate skills even further, and give you the best possible preparation for the future. We'll try to discuss Development, from the very beginning all the way to plans for the years to come.*

## The chicken or the egg?

One year ago, Lucas Vanlaer was part of the Corporate Relations team, when he discovered that there was room for improvement. Even though Corporate Relations made sure that you would get a job, he found that something was missing that you do cannot learn in class: how to prepare for this future job. Because let's be honest, you can study for an exam, but how do you prepare for a job interview? And how do you know whether you like consultancy?

He saw room for improvement in giving students in their final year a chance to improve their skills, and founded the Development branch. He gathered a group of competent people, and weeks later he and Alberick, Kristof, and Karen were working out the details of the idea.

## The idea

Knowing that you want to prepare students for their future jobs is one thing, but where do you actually start?

VTK Development started out by offering three different kinds of events: workshops, soirées and screenings. Workshops included: preparation for a job interview, writing a resume, and solving business cases. The workshops are hosted by people from the business world, but without the focus on their specific companies. This allows to focus only on the development of stu-

dents' skills. To improve the quality and efficiency of these workshops, they're always divided into small groups.

A second part of Development is in the soirées. These are evening lectures that focus more on educating a larger group of students instead of on interaction. These soirées can lead to a follow-up workshop later on to develop the skills learned in the evening lecture.

And finally there's the screenings. These are events where students' resumes and



## Technology consulting workshop track

More and more consultancy companies are looking for engineering students these days. But what exactly does a consulting job mean? And how do you know if consultancy is the job for you? With these questions in mind, VTK Development organised a workshop about technology consulting in cooperation with Accenture (a management and consulting company). In this workshop track, last year students used four consecutive wednesdays to solve a challenging business case. The students acquired information about the problem, set up a business plan, consulted with a CIO and eventually presented the solution they found.



portfolios are screened by an external company to improve the quality and layout of these documents.

### First steps

A succesful career starts with a good resume. That's why Development organised a Career Evening about resume writing. This evening was organised in cooperation with LBK Corporate Relations (a similar branch from the bio-engineers). A recruiter from Mercuri Urval explained the do's and dont's of writing a good resume. What stuck to us most was that we have to avoid full sentences, it's better if we add a personal motivation, and we need a LinkedIn acoount. After this evening, the last year students could start writing or improving their own resumes. Two weeks later, VTK Development organised a resume screening where recruiters from Xelvin would give you personal remarks about your resume. Later this semester, a portfolio evening will be organised for the architects among us, so be sure to keep an eye out for mails!

After you send out your resume to several companies, it's time for the real deal: job interviews! VTK and LBK joined forces again and together they



organised an evening centered around job interviews.

Even though we, as students of Engineering or Architecture, have the perfect profile for entrepreneurship, very few people are actually motivated to found something new. Therefore VTK Development decided to support LCIE (Leuven Community for Innovation driven Entrepreneurship). Their goal is to stimulate entrepreneurship among students, researchers, and professors. LCIE introduced itself on the LCIE Launch Event, which was made possible by VTK and a large group of other student unions from Leuven. For more information on Entrepreneurship in Leuven, you can check out <http://www.lcie.be/>

VTK Development can also add a succesful Startup Fair

and a consultancy workshop to their list of achievements. These are summarized in the blue sections.

### Plans for the future

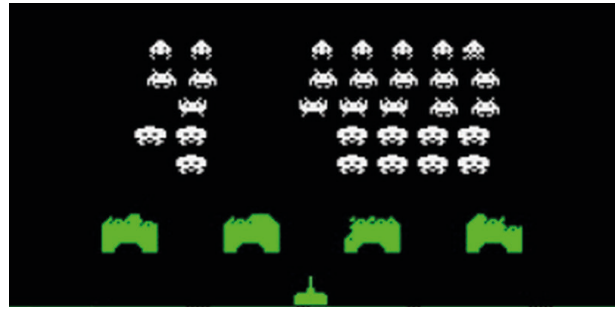
As VTK Development has only just been founded, there is still much room for improvement. Therefore it is important to know what students want, and what companies can offer. Do you have remarks about past events or ideas for interesting workshops or soirées? Be sure to let us know by mailing to: [development@vtk.be](mailto:development@vtk.be)

## Startup Fair

As more and more young entrepreneurs are founding a startup company, but find it difficult to recruit students, VTK Development organised a Startup Fair in December. This Fair is like the Jobfair, but only for starting companies. This Fair was organised in cooperation with Ekonomika and AFC Leuven. About 20 startups got a chance to introduce their company to the students. This allowed students to see entrepreneurship from a different angle than the one they usually see in large corporations, and VTK Development hopes to motivate entrepreneurial students to start their own business.

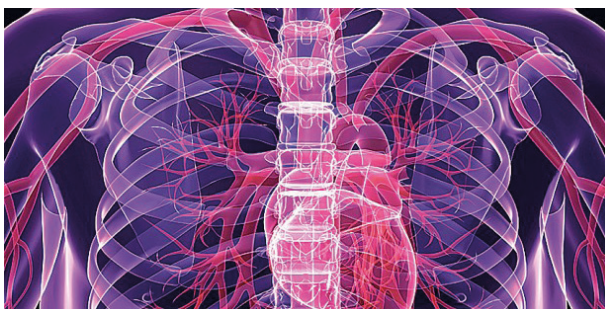
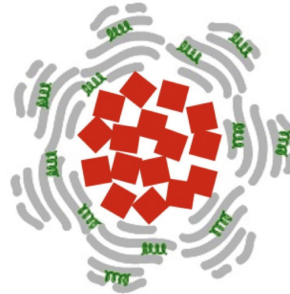
# Last month in engineering

Google has developed a [new AI](#) that has learned to play 49 different retro games. The AI learns much like a human baby, trying out random things and seeing the result as reward or punishment. With this, Google has the first AI which can learn a variety of tasks independently.



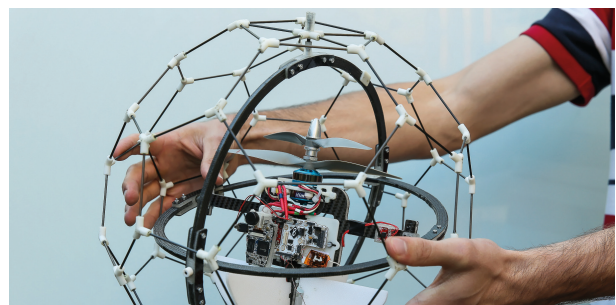
The University of California Hospital now has [robots](#) in service that can deliver drugs, clean bed sheets, and move away medical waste. The robots do not need rails or human 'drivers', but communicate with the network and know what to do all by themselves.

Researchers have developed [bio-magnetic nanoparticles](#) that can destroy blood clots a 100-1,000 times faster than current standard methods. The particles consist of iron oxide, and have a biological camouflage which contains the enzyme that will destroy the blood clot.



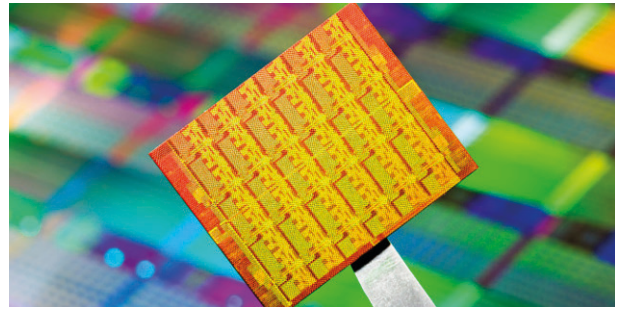
In similar drug delivery-related news, researchers have successfully tested [drone nanoparticles](#) on mice for the first time. The drone particles find cholesterol plaques in arteries, and release a protein that repairs the damage. This significantly reduces the chance of heart failure.

A new [drone](#) has won a prize for its ability to assist in search-and-rescue missions. The drone is ball-shaped and strong, yet flexible, allowing it to squeeze into tight spaces and to bounce off obstacles without damaging the core drone itself.



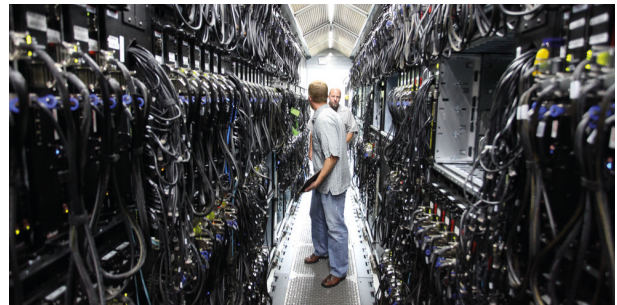


Intel, one of the main innovators working on Moore's law, has announced that they are working on a production process for **10 nm transistors**, and that they expect the first chips to roll out in early 2017. They expect 10 nm to be the last transistor size based on silicon.



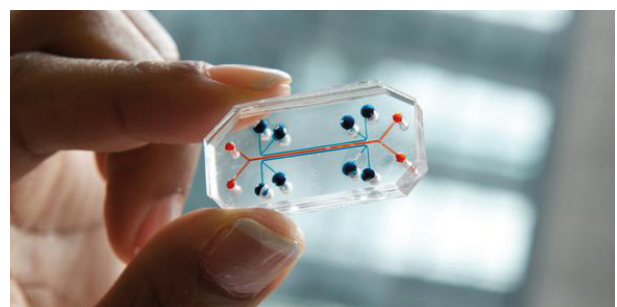
Tesla is developing a **battery** that can power your home. Currently there are few options when a powerout happens, and most people can't afford a primitive yet expensive gas-driven generator. Tesla hopes to release the cheaper, modern alternative within six months.

Microsoft's new **image recognition system** beats all the current alternatives – including humans. The system scores a 4.94% error rate on the widely used ImageNet dataset, compared to 5.1% error rate in humans.



Chinese researchers have developed a fluorescence-based **breath analyzer** that detects volatile organic compounds only present in the breath of people with lung cancer. This technique may help us to detect the disease more easily, allowing patients to be treated at an earlier stage.

Engineers from Harvard have developed a **system** of mini-organs on chips, a model that mimics the human body. This allows them to test countermeasures for biological, chemical, and radiological warfare agents without the need of testing on real humans.



# Leuven Secrets: De Vaart

One of the first things you notice when you arrive in Leuven is how small the city really is. People tell you to visit the Oude Markt and the Ladeuzeplein, and when you've done that, you've basically seen it all. Leuven is a wonderful place to live as a student, but you can easily explore the city in a day. But if you do happen to live here for a few months, you might explore more than just the Oude Markt. Because if you do, you can find places that very few students manage to find, and when you find a good place like that, it really feels like a personal victory.

One of those places for me is the Vaartkom, which is basically the northern part of Leuven. You must have noticed by now that the Dijle is not really a river here in Leuven, it's way too small for cargo boats. And yet, Stella Artois and the other companies around Leuven need to export their goods in some way, and they're not going to put all their liters of beer in a truck. There actually is a canal that goes from Leuven (near the brewery) all the way to the Schelde river near Antwerp. This canal, 'de Vaart', is still used today by the companies just outside Leuven. The canal starts just inside the city ring, and whereas it used to be the starting point for ex-



port, it now is a lovely harbor for private boats and yachts.

During the previous century, the brewery of Stella Artois was actually located inside the city ring. The brewery used to export their beer over the canal (which it still partly does), but eventu-

ally Stella Artois moved outside of the ring for logistic reasons. The old brewery, called 'De Hoorn', still exists though, and all the old brewing kettles are still intact. In fact, in the previous semester BASF (The chemical company) organized a meeting there for future engineers, and I found it very interesting to walk around in this part of beer history.

Another building you immediately notice if you go to the northern part of Leuven is the abbey. A huge, almost fortress-like building on the top of a hill overlooking the city. First time I went there, I tried cycling up the road around the hill, but halfway I gave up and continued on foot. I went all around the hill, reached the foot of the abbey,





parked my bike, and discovered that there was a park on the top of the hill. I explored the paths, found some chapels, and chased after ducks and goats. But the coolest part about the park was the view over Leuven. On a good day, when the sky is cloudless and the sun is shining at just the right angle, you can see for miles and miles in each direction. I must have spent hours on that spot, just trying to find all the churches and cafes I knew, as well as the campus buildings. And when I really get tired of all the deadline work, I go to that spot just to get a break from the world.

The abbey itself is of the order of St. Benedict, and is inhabited by both students and monks. It has had a tu-

multuous history of being a castle, getting demolished to the ground, being rebuilt, being bombarded in the Second World War, and all the while being rebuilt again to become the abbey we see today. Currently, it houses an active order of monks, who even issued the production of their own beer ('Keizersberg' or Emperor's Hill), named after the hill on which the abbey stands.

Another place that I like to visit is the Hungaria climbing center. They charge very little, and apart from regular climbing walls, they also have an adventure parcours that you can cross through the tower. Another feature that I still haven't tried yet is their 'speleobox', which is a

network of very small, very dark wooden tunnels. To get through the entire thing, you have to be very flexible, and some darkvision doesn't hurt either. Either way, it's a nice deviation from the somewhat boring climbing walls on the campus.

For me there's no reason to ever be bored in Leuven, and I like visiting the Vaartkom as a change of scenery. If you have an intensive student life, and go out a lot, sometimes it feels good to just sit by the dockside in the morning and watch the boats from a distance. It's a feeling of serenity I could never do without.





# Photo Report: De Afrekening





