



Mike Kriele

Curriculum Vitae
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PERSONAL PROFILE

Efficiency Driven

Liking controllable, set methods of working and finding that dedication and improvement count towards making things manageable. Will place relevance on rules and agreements, and on analysing facts.

Innovation Driven

Focus is on change, on generating new ideas. Am able to think based on concepts. Need freedom in order to bring ideas to development. Keep tabs with the market by establishing and maintaining new contacts.

Result Driven

Want to see results and have a strong drive to score and negotiate with external parties. Am action minded. Am particularly focussed on reaching short term and long term targets.

Team Driven

Consider it important to have a good atmosphere and support and attention for one another. A personal approach and showing of understanding for each other is essential.

Quick Learner

Always eager to learn new things. To further knowledge and skills.

Polite

Polite, respectful and courteous manners.

EDUCATION

Msc. Electrical Engineering

September 2014 - Present

University of Twente

A master in the field of Electrical Engineering with the specialization on Telecommunication Engineering Sciences (TE).

Telecommunication Engineering concentrates on optical signal processing and networks, mobile communications, microwave techniques and radiation from ICs and PCBs.

The main focus of this programme can be divided into three categories: Short-Range Radio, Microwave Photonics, and Electromagnetic Compatibility.

Msc. Computer Science

September 2014 - Present

University of Twente

A master in the field of Computer Sciences with the specialization on Wireless Sensor Systems (WiSe).

This programme addresses a new paradigm for bringing the exibility of information technology to bear in every aspect of daily life. It foresees that people will be surrounded by

embedded and exibly (wirelessly) networked systems that provide easily accessible yet unobtrusive support for an open-ended range of activities, to enrich daily life and to increase productivity at work. These systems contain a mixture of hardware and software: their scope may be as simple as a sensor, or as complex as a portable device, or even an entire building or city. The specic nature of these systems require them to be open, scalable, adaptable and dependable, while integrating heterogeneous devices ranging from tiny actuators to larger computers. The programme WiSe studies not only the fundamentals of wireless and sensor systems, but the context of the sensor systems as well.

Pre-Master Electrical Engineering

September 2013 - April 2014

University of Twente

In the Pre-Master Electrical Engineering's programme homologation courses will be given in order to be allowed to the Electrical Engineering Master.

I have taken this pre-master as part of the minorspace within my Bachelor's study.

Bsc. Creative Technology

September 2011 - June 2014

University of Twente

In the Creative Technology bachelor's programme, taught entirely in English, I have learned to adapt state-of-the-art technology or new media in an original/appealing way to create interaction with or between users. I have worked on applications that make life healthier, easier and more fun. Think of a sensor that changes light and music in the room according to your mood, or a sensor that measures the environment and then advises you which garden plant to plant.

Theme-based projects challenged me to think about smart applications of technology and new media. I have learned to apply knowledge from various fields such as sensor and media technology, human behaviour, communication and business acumen.

I am trained as a designer with technical expertise and a sensitivity to social developments. I have worked on the cutting edge of high technology, while maintaining a clear human touch. I am a real asset to employers in the creative industry, new media, product design or communications.

CERTIFICATES

Heterogeneous Parallel Programming

November 2012 - February 2013

University of Illinois at Urbana-Champaign

The course covers data parallel execution models, locality, parallel algorithm patterns, and scalable programming using joint MPI-CUDA in large scale computing clusters. As part of the course work, students were required to complete 5 quizzes and 5 programming assignments. I passed the course with distinction - Grade: 10.

WORK EXPERIENCE

Junior Telecommunications Engineer (Intern)

April 2016 - Present

Curtin Institute of Radio Astronomy, Full-time

Internship at the Curtin Institute of Radio Astronomy (CIRA) in Perth Australia. The CIRA is working on a global initiative called the Square Kilometer Array (SKA), with as goal to learn more about the origins of the universe. For this purpose antenna arrays have to be constructed, and proper signal processing has to be done. My task is to design, construct,

and implement a filter for a proper signal input to the digital domain. Another task is to fix an unknown signal ripple in a cable of the Murchison Widefield Array (MWA).

Teaching Assistant - Dynamic Systems

February 2016 - April 2016

University of Twente, Part-time

Dynamic Systems is a first year Creative Technology course to give students a better insight into the dynamic behaviour of physical systems. I had to grade assignments, oversee practical and tutorials and assist students.

Teaching Assistant - Interaction Design

November 2015 - January 2016

University of Twente, Part-time

(Intelligent) Interaction Design is the second module within the University of Twente's TOM module for second year students. It is a multidisciplinary module for students of Creative Technology, Business and IT, and Computer Science. The goal is to perform scientific research and covers the courses Research Methodology, Structured Programming, Artificial Intelligence and Project Work. My task is to assist during Research methodology as well as programming sessions as well as managing the deadlines for the project.

Treasurer

December 2013 - December 2015

Studenten Net Twente, Part-time

Studenten Net Twente (SNT) is an association situated at the University of Twente. SNT provides internet, hosting and backup services for associations and students within the university, and also to some associations at other universities in the Netherlands. My task is to oversee the treasury department.

Teaching Assistant - Operating Systems

September 2015 - November 2015

University of Twente, Part-time

Operating Systems is a third years bachelors course within the study Computer Science. My tasks were to periodically interview students to see if they understood the topics correctly and tell them if they passed the course or not. Topics were: C Programming, Java, Linux OS, Computer Processes.

Teaching Assistant - Smart Technology

University of Twente, Part-time

September 2015 - November 2015

Smart Technology is the first second year module within the new TOM system of the University of Twente. Here second year students have a set of courses that are related to the module. I had to assist the students during practical sessions and tutorials, as well as grading lab manuals. Courses related were Electrical Engineering, Systems and Signal Processing, Sensors, and Systems and Control.

Teaching Assistant - Source to Senses

May 2015 - July 2015

University of Twente, Part-time

In the course Source to Senses I had to assist students during ECG and EMG measurement projects and grade their work. It is mostly focussed on connecting biological data to everyday hardware.

Teaching Assistant - Algorithms

May 2015 - June 2015

University of Twente, Part-time

Algorithms is a follow-up course for first year Creative Technology students to gain deeper understanding on how to set up functions and classes. They will also learn to program and develop sorting algorithms. My task is to assist the students with questions and help

debugging where necessary.

Student Assistant - Physical Systems

February 2015 - April 2015

University of Twente, Part-time

Physical Systems is a first year Creative Technology course to give students a better insight into the dynamic behaviour of physical systems. I had to grade assignments and assist students.

Teaching Assistant - Practical Support

March 2015 - March 2015

University of Twente, Part-time

As a teaching assistant I had to support students by answering question during various practicals and grade their work.

Instructor - Bicycle Light Workshop

November 2014 - Februari 2015

University of Twente, Part-time

The bicycle light workshop is the initiative of the Twente Academy located at the University of Twente. The initiative has as goal to bring more overall interest to young students (high school) and show them what is possible with technology. As an instructor it was my goal to teach the high school students how to program their own bicycle lights, and the possibilities that come with it.

Student Assistant - Visitation Preparation

January 2015

University of Twente, Part-time

Given the new nature of the study Creative Technology, every three years a visitation committee has to declare whether or not the study is still on the right tracks. My task was to gather resources to give the committee a complete picture of the study programme.

Student Assistant - Research Methodology

November 2014 - January 2015

University of Twente, Part-time

Research Methodology is a course that focusses on creating awareness on problems that students will most certainly encounter in their academic curriculum and experimental research. It will give insight in different types of research methods and learn students how to critically analyze scientific documents. My role as a student assistant was to check and sign off exercises as well as help during lectures.

Student Assistant - Physical Computing

November 2014 - December 2014

University of Twente, Part-time

Physical Computing is a first year Creative Technology course. The main goal was to introduce students to simple C++ programming and understand the use and abilities of the Arduino development board. I had to help the students with tutorials and assignments, giving them a sign when the work was done sufficiently.

Student Assistant - Structured Programming

November 2014

University of Twente, Part-time

Part of the Creative Technology Second year. Goal is to give students a better insight in C++ programming, open frameworks, structured programming and algorithms. My task was to help debugging programming errors and sign the assignments when done.

Student Assistant - Smart Technology

September 2014 - November 2014

University of Twente, Part-time

Smart Technology is the first second year module within the new TOM system of the University of Twente. Here second year students have a set of courses that are related to the module. I had to assist the students as well as prepare content for the courses:

Introduction to Electronics, Sensors and Actuators, Communication Systems, and Control Systems.

Student Assistant - SenSafety Project

June 2014 - November 2014

University of Twente, Part-time

The SenSafety project is a project within the Pervasive Systems group at the UT. It is a European project that focuses on heterogeneous hierarchical sensor networks for safety and security in public places. The project will have contributions in four areas: system architecture, intelligent streaming data sensors, networking protocols and distributed signal processing. Within the system architecture area, research focuses on combining the processing of streaming data (e.g., audio and video) and events (e.g., detection of movement) in one system. The research on intelligent streaming data sensors focuses on the energy efficient processing of sensed data as well as the reconfiguration of already deployed sensors. As an assistant I had to make a mock-up and scale model prototype of their system.

Student Assistant - Smart Products

April 2014 - June 2014

University of Twente, Part-time

Part of the Industrial Design Bachelor study, first year students have to develop a better insight in electrical engineering by developing a smart product. My task is to help them with circuitry problems and guide them through the prototyping process.

Student Assistant - Algorithms

April 2014 - June 2014

University of Twente, Part-time

Algorithms is a follow-up course for first year Creative Technology students to gain deeper understanding on how to set up functions and classes. They will also learn to program and develop sorting algorithms. My task is to assist the students with questions and help debugging where necessary.

Student Assistant - Intro Computer Science

September 2013 - November 2013

University of Twente, Part-time

Introduction to Computer Science is a starting course for Creative Technology. The goal is to have students gain deeper knowledge about computer science. I had to help students with the assignments and sign them when they were done.

Student Assistant - Structured Programming

September 2013 - November 2013

University of Twente, Part-time

Part of the Creative Technology Second year. Goal is to give students a better insight in c++ programming, open frameworks, structured programming and algorithms. My task was to help debugging programming errors and sign the assignments when done.

Teaching Assistant - Electrical Engineering

September 2013 - November 2013

University of Twente, Part-time

Part of the Creative Technology Smart Technology track. Second year students had to develop a better insight in electrical engineering and had to develop the skill to create lab journals. My task was to develop and run the tutorial classes and assist them during those classes. I also had to grade the journals.

Teaching Assistant - Electrical Engineering

June 2013 - July 2013

University of Twente, Part-time

Part of the Industrial Design Bachelor study, first year students had to develop a better insight in electrical engineering and had to develop the skill to create lab journals. My task

was to help them with circuitry problems and guide them through the lab journal writing proces. Also had to grade the journals.

Student Assistant - Physical Systems

March 2013 - June 2013

University of Twente, Part-time

Physical Systems is a first year Creative Technology course to give students a better insight into the syname behaviour of physical systems. I had to grade assignments and assist students.

Student Assistant - Physical Computing

October 2012 - January 2012

University of Twente, Part-time

Physical Computing is a first year Creative Technology course. The main goal was to introduce students to simple C++ programming and understand the use and abilities of the Arduino development board. I had to help the students with tutorials and assignments, giving them a sign when the work was done sufficiently.

Student Assistant - Mathematics

October 2012 - November 2012

University of Twente, Part-time

Mathematics build-up course to help first year Creative Technology students get used to university level math. My task was to assist students with questions and grade their work.

Student Assistant - Intro Computer Science

September 2012 - October 2012

University of Twente, Part-time

Introduction to Computer Science is a starting course for Creative Technology. The goal is to have students gain deeper knowledge about computer science. I had to help students with the assignments and sign them when they were done.

Merchandiser

May 2008 - May 2011

Action Non-Food B.V. Texel, Part-time

Weekend and holiday job. Main focus was to restock merchandise, operate cash registers and assist customers in store.

PROJECTS

Lighting Concept Design Haagse Parc

June 2014 - Present

Municipality of Almelo

Because Almelo liked our Light Challenge lighting concept, they wanted to implement it somewhere within their city. Thanks to recent developments they want to renovate the Haagse Parc in Almelo and implement our lighting there. I will be doing this with a group of students I also did the Light Challenge with.

Our main goal will be to completely work out and develop the lighting concept to be placed in the Haagse Parc. We have to have close contact with local companies and the municipality.

Main goal is to develop the lighting system in such a way that it is smart, durable and energy efficient.

Participant BMW Automotive Hackdays

March 2016

ABHI: The Emotion In Your Car

The Automotive Hackdays from BMW was a 6 day hackathon organized by the UnternehmerTUM of the TU munich. During the hackathon teams had to be formed and solutions for nowadays vehicular problems had to be devised. We creative a preemptive analytics platform for cars which allowed users to keep a logbook of their car's health status, which

also updates the user when there is a high probability something might break. For this hackathon, a working mobile application, front-end and backend were made.

2nd Runner up Startify 7: Bootcamp

September 2015 - Oktober 2015

JAMS Wearables

The Startify 7: Bootcamp was accelerator bootcamp organized in Brussels and was designed as a challenge for all winning groups from all Startify 7 summer schools across Europe. We pitched the idea of the smart bracelet in front of venture capitalists and got third place.

Participant Intel IoT Roadshow Paris

September 2015 - Oktober 2015

MagicMe

The Intel IoT Roadshow Paris was a three day hackaton organized by intel at which groups had to be formed and teams had to design and prototype a smart IoT solution. We created a smart magic wand which had pattern recognition and allowed children to learn words more efficiently.

Winner Startify 7: IoT Summer School

August 2015

JAMS Wearables

The Startify 7: IoT Summer School was an eleven day summer school which took place in Munich and Nuremberg Germany. During this summer school teams had to be formed and an innovative IoT solution had to be idealized and designed. We created a smart modular bracelet.

Coach Light Challenge 2015

February 2015 - July 2015

Municipality of Almelo

The Light Challenge is an initiative by Dutch municipalities to nd new lighting concepts with the help of students. It is a project which takes place every other year and started 2011. The students get assigned to a specic municipality and they have to meet local companies and inhabitants to turn their wishes into a new innovative lighting concept.

As a coach it is my task to support the participants representing the municipality of Almelo with problems regarding their work and discuss their ideas and progress.

Finalist NRG Battle Europe Edition

November 2013

E.ON

The NRG battle Europe Edition is a challenge for students all over europe to participate in a thinktank and come to an innovative new idea for a specific problem. My assigner was E.ON.

Energy savings in a building complex. An E.ON project for the NRG Battle 2013 Europe Edition. How to save 50% of the energy in an exiting building complex, with only a limited budget and a maximum payback period od 3 years?

The concept I came up together with my group was “Heating the room with cool air” by use of air flow and liquid characteristics it is possible to maintain a proper climate by the use of cool air flow. This is not only cost effective in implementation, but also in usage.

Case Winner Create Tomorrow

June 2013

Huisman

Create Tomorrow is a think-tank at the University of Twente. A variety of companies participated in hope to find a solution for a common problem withing their field of work.

Our team had to develop a solution for Huisman, a company that is in the field of oil drilling platforms. We had to come up for a solution to move oil drilling jackets easily and

cost effectively.

Our team ended up having the best solution out of the 20 groups participating.

Light Challenge

February 2013 - July 2013

Team Almelo

The Light Challenge is an initiative by Dutch municipalities to find new lighting concepts with the help of students. It is a project which takes place every other year and started 2011. The students get assigned to a specific municipality and they have to meet local companies and inhabitants to turn their wishes into a new innovative lighting concept.

I did participate with the municipality of Almelo, and a Team of fellow students, and designed a down-to-the-ground lighting system that used reflective technologies to gain the same efficiency as normal lighting poles with lesser power. The concept was Modular and durable designed.

see lightchallenge.nl for more information

SKILLS

Languages

Language	Listening	Reading	Spoken Interaction	Spoken Production	Writing
Dutch	C2	C2	C2	C2	C2
English	C2	C2	C2	C2	C2
German	C1	B2	B2	B2	B1

Hardware

Subject	Beginner	Familiar	Advanced	Expert
Prototyping			X	
PCB Design		X		
Lasercutting			X	
3D Printing		X		
Designing			X	
Conceptualizing		X		

Software

Subject	Beginner	Familiar	Advanced	Expert
(My)SQL			X	
C,C++			X	
CSS(3)			X	
HTML(5)			X	
Java		X		
Javascript			X	
PHP		X		

REFERENCES

Available upon request