# Willem Melis

**Permanent Address**
caelfstraat 8
8400 Oostende
+32 (0476) 491952

**Other information**
Github: github.com/zilleplus
Personal Website: zilleplus.github.io
Email: Willem.Melis@outlook.com

## OBJECTIVE

Finding a intellectually challenging job.

## EDUCATION

*Master of engineering*, Mathematical engineering
KuLeuven, Leuven                                                               2018
THESIS - Newton-type operator splitting methods for embedded model predictive control
https://github.com/kul-forbes/nmpc-codegen.git

*Master of engineering Technology*, Electronics and ICT - option ICT
KuLeuven, Oostende                                                             2015
THESIS - Isolatie van kritische processen op embedded Linux Systemen
Translation thesis title: Isolation of critical processes on embedded Linux systems

*Bachelor*, Bachleor of electronics - ICT option ICT
KHBO, Oostende                                                                 2013
THESIS - ARTA platform capaciteitsbeheer
Translation thesis title: ARTA platform capacity management

## PROFESSIONAL EXPERIENCE

*Proferro, Ieper*                                                              2015
Production - mechanical department            Project related to Master of engineering Technology
- Extract data from a PLC network, save it in a SQL database and visualize it. This project was realized in C#.NET and MSSQL in collaboration with Wago Louage.

*Zapfi , Brugge*                                                               2013
System engineering                                                       Summer job
- Construct a PHP-MYSQL system that generates configuration files of wi-fi access points using openWRT.

*Artilium, Loppem*                                                            2013
System engineering                                                       Internship
- Collecting and visualizing information of the ARTA platform. This was realized in C#.NET and MSSQL.

*Vesuvius, Oostende*                                                          2012
System engineering                                                       Summer job
- Maintenance and update of the computer software.

## PROGRAMMING SKILLS

- ANSI C89                        ADVANCED: thousands of lines of code written.
- C#.NET                          ADVANCED: thousands of lines of code written.
- Java                            GOOD: first programming language learned.
- Matlab/Python                   GOOD: used in all sorts of exercises.
- MSSQL/MySQL                     GOOD: fluent in the basic functionality.
- c++, Fortran, Bash, Powershell  OK: never used in big projects

## LANGUAGE SKILLS

- Dutch                           ADVANCED: native speaker
- English                         GOOD: written and spoken
- French                          LIMITED: basic words/grammar

## INTERESTS

Reading, swimming, technology and applied mathematics.
Machine learning, system theory, control theory, differential equations, Stochastic Processes, Numerical Analysis, Monte Carlo Simulations

## BOOKS I FIND INTERESTING

- The wizard of Menlo park - Randall Stross          A story of failures .
- The black swan - Nassim Nicholas Taleb          A different way of thinking about risk.
- Thinking, Fast and Slow - Daniel Kahneman          The human aspect of The black swan.
- Zero to one - Peter Thiel          Is there still profit, if there is fair competition?
- Liar's poker - Michael Lewis          Where did the popularity of mortgage bonds come from?

## ADDITIONAL SKILLS

- Windows Server 2008-2012          Setup AD domain/mail server.
- Linux server          I am fascinated by Unix-like machines since i was a teenager.
- Network engineering          I had very high scores on CCNA Exploration 1,2,3 and 4.
- Network and Server Hardware          I enjoy keeping up with the latest enterprise hardware.
- Embedded Linux          Basic programming / compiling in kernel / user space.

## THINGS I CAN, BUT DON'T LIKE

- Web design          I prefer more low level/detailed programming.
- GUI/forms          I don't have any feeling for it, but i can program it.

## CLASSES MATHEMATICAL ENGINEERING

- Case Studies: Mathematical Engineering
- Complex analysis and applications
- Computer Vision
- Cryptography and Network Security
- Deterministic and Stochastic Integration Techniques
- Medical Imaging and Analysis
- Methods and Algorithms for Advanced Process Control
- Nonlinear Systems
- Numerical Simulation of Differential Equations
- Optimization
- Parallel Computing
- Scientific Software
- Stochastic Signal and System Analysis
- Vector Machines: Methods and Applications
- System Identification and Modeling