Jelle Langedijk

Phone

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↑ Location

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Education

Huygens Lyceum Eindhoven | Natuur en Techniek

2012-2018

Completed the final exam Atheneum in the program Nature & Technology with favourable consequence. Graduated in the *Dutch*, *English* and *French Language and Literature*, *Mathematics* (B & D), *Physics*, *Chemistry* and *Management and Organisation* (MO).

Eindhoven University Of Technology | BSc Mechanical Engineering

2018-2021

Completed the propaedeutic phase in the first academic year (2018-2019). Obtained Bachelors degree with great appreciation, average grade of 7.6/10. Curriculum existed of courses in

- Dynamics of Mechanical Systems and Robotics;
- Control Systems;
- Material Science;
- Technology Entrepreneurship;
- Manufacturing Networks;
- Transport Phenomena (Fluid Dynamics, Heat, Flow).

Bachelors End Project done in the *Dynamics and Control* group, see *Projects*.

Eindhoven University Of Technology | MSc Mechanical Engineering at the Dynamics and Control Group (Special track Manufacturing Systems Engineering) 2021-present

Curriculum consists of courses in

- Acoustics: vibration isolation, structure-borne sound, sound radiation, propagation and sound imaging;
- Classic Dynamics: linear, nonlinear, multi-body, switching;
- Network Dynamics: consensus, cooperation, sensor allocation;
- Control: linear, nonlinear, Design Structure Matrix Modeling;
- Manufacturing Networks: discrete models, stochastic models, dynamical models, queuing theory;
- Mathematics: (systems of) Ordinary Differential Equations, Partial Differential Equations;
- Data Analytics: Machine Learning (Supervised, Unsupervised), Neural Networks;
- Manufacturing Technology;
- Fracture Mechanics.

Expected to complete all courses within the first academic year (2021-2022). Average as of 31/05/2022: 8.3/10.

Skills

Engineering

- Classic Dynamics
- Network & Cooperation Dynamics
- Switching Dynamics
- Structural Dynamics
- Signal Processing
- Acoustics

- Linear & Nonlinear Control
- Manufacturing Network Modeling
- Modeling of Manufacturing Processes
- Machine Learning
- Fracture Mechanics

Software and Programming, Scripting and Typesetting Languages

- MATLAB, GNU Octave
- Simulink
- Python
- Siemens NX 12
- Late Property Property
- Markdown, R Markdown
- PGF/TikZ

- GNU+Linux
- Bash
- Mentat & Marc

Soft Skills

- (Inter-Disciplinary) Teamwork
- Time Management
- Critical Thinking

 Working independently and proactively with high self-discipline

Projects

- Simulating Skyscrapers during an earthquake with a pendulum. Physical model verified with a numerical model in MATLAB;
- Consulted Vanderlande in business model innovation for their new AGV Fleet technology for airport logistics;
- Bachelor End Project: Developing a Discrete-Event Simulation toolbox in *Python* as alternative to the TU/e's current software package $\chi 3$. Supervisor: A.A.J. Lefeber. Graded 9/10; 10/10 for my self-reliance and professional behavior. Paper publicly available here.

Work Experience

Shop Assistant at Kruidvat

2014-2017

Worked as both a shop assistant as well as a stock clerk.

Employee at Washin7 Eindhoven

2018-Present

Work as a car wash employee with many functions, like cashier, guiding cars in the automatic car wash, operating the car wash, damage reporting, cleaning and recently leading a team with full responsibility.

Volunteer at Huygens Lyceum Eindhoven

2019,2022

Volunteered at the "tafeltjesavond" event twice as alumni, where I helped high-school students by making their choice of follow-up education.

Hobbies

- I collect HIFI audio gear, as well as music in different formats like Records, Cassettes and High Bitrate FLAC's. I'm always in search to optimise any aspect of my system with the knowledge I have;
- Since I'm an advocate for Free Open Source Software, I often tinker around with GNU+Linux to optimise my workflow and learn new things.