FREDERIK HOGENBOSCH

Developer ~ Engineer

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📍 Rotterdam, NL

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SKILLS

Languages: C/C++, Python, Matlab, Julia, R, JavaScript, CSS/HTML, SQL.

Technologies: Linux, git, Simulink, ROS, FreeRTOS, NuttX.

INTERESTS

- Reading
- Playing guitar
- Running and racketball

EDUCATION

9/2020 - 7/2024 — **Master Systems and Control** — Delft University Of Technology, Delft, NL
with a final thesis on the topic 'Canonical Polyadic Decomposition in Autoencoders for ECG analysis', which was graded with an 8.5.

9/2019 - 5/2020 — **Minor Applied Econometrics** — Vrije Universiteit, Amsterdam, NL
included a 4 week internship at ING Bank, Amsterdam.

9/2016 - 6/2021 — **Bachelor Applied Physics** — Delft University Of Technology, Delft, NL
with a final thesis on "Efficient methods for proton dose calculation", which was graded with an 7.5.

EXPERIENCE

7/2020 – present — **Co-Founder | Part time** — Shore Systems, Delft, NL
- Shore Systems develops fully automated hydrogen drones for the purpose of inspecting remote assets.
- Responsible for software and controls team.
- Developed the avionics for a 30kg drone.
- Supervised two interns throughout their internships.
- For more information please visit: https://www.shoresystems.nl

`C++  /  Python`

9/2023 – 11/2023 — **Machine Learning Intern | Full time** — IKEA Digital, Amsterdam, NL
- Produced a pipeline for generating training data with the purpose of fine-tuning a Large Language Model.
- Managed to finish the pipeline within the first five weeks for the first iteration of the model that was presented to the management board of IKEA.

`Python  /  SQL`

8/2018 – 4/2020 — **Software engineer | Full time** — Silverwing Aeronautics, Delft, NL
- Silverwing is a TU Delft Dreamteam that competed in the GoFly Boeing student competition in San Francisco with an autonomous personal aircraft.
- Part of the controls team that developed the autopilot software and electronics for a 200kg electric drone.
- Implemented the Incremental Nonlinear Dynamic Inversion (INDI) algorithm in the PX4 flight stack.
- Developed the groundstation for in-flight monitoring and control of the aircraft.
- Fulfilled the co-pilot role during flight testing to manage all in-flight systems.
- For more information please visit: https://www.flysilverwing.com

`C++  /  Python`

5/2021 – 12/2023 — **Web developer | Part time** — TU Delft Library, Delft, NL
- Maintained website themes in the TU Delft style for various faculties.

`Javascript  /  CSS  /  SQL`

5/2017 – 8/2017 — **Web developer | Part time** — Zite Media, Delft, NL
- Developed websites for various clients.

`Javascript  /  CSS  /  SQL`

10/2018 – 10/2019 — **Lecture organizer | Part time** — Intelleccie, Delft, NL
- Organized lectures on varying topics throughout the year.
- Audiences of 100+ people.

LANGUAGES

Dutch - native, **English** - B2+