

Erik Böhlin

Education

2022–2024 **Degree of Master of Science with a major in Electrical Engineering**, *Linköping University*.

Mechatronics profile with a Masters degree in Electrical Engineering, I have successfully completed advanced coursework in Automatic Control, Sensor Fusion, Simulation Modelling, Vehicle Dynamics and Hydraulics. These courses have not only deepened my technical knowledge but also sharpened my interest in integrating automatic control with vehicle systems.

2019–2022 Bachelor of Science in mechanical engineering, Linköping University.

A strong foundation in mathematics, physics and engineering science. Core coursework in mechanical design, thermodynamics, fluid mechanics, material science and control systems. Bachelor thesis on construction of a control system for the motor and transmission of an electrically driven rail car.

Formula student

2023–2024 LiU Formula student, Electronics.

Developing the Vehicle Control Unit (VCU) of our ER24 project. The VCU is responsible for controlling the torque on the electric motor through CAN communication, managing the cooling of the inverter and motor, and monitoring the plausibility of the pedal senors, and supervising the shutdown circuit.

2023 LiU Formula student, Low Voltage.

Made the wire harness for our ER23 project.

2021–2023 **LiU Formula Student**, SIMULATION MODEL CREATOR.

Worked in Matlab and Simulink to create a model of our car to provide input to the design teams on what can improve the cars performance.

Work Experience

December Engine Controls Engineer, KOENIGSEGG AUTOMOTIVE, Ängelholm.

2024 Working with software and testing of the Jesko diagnostic system.

Summer 2023 **Development Engineer**, T-ENGINEERING, Trollhättan.

Summer job at a company which makes control systems and software for cars. Experience gained: Made scripts in Matlab that checks if the Simulink model is made according to company standard.

Summer 2022 Junior-constructor, CWLUNDBERG, Mora.

Summer job at a classic workshop that manufactures roof safety products and fasteners for mounting on roofs.

Experience gained: FEM and CAD in SOLIDWORKS

- FEM analyses on various roof products, e.g. solar panel mounts and roof ladders.
- 3D-modeling
- Load tests on one of their new roof mounts.
- 2016–2018 Administrator and inventory taker, Mora kommun tekniska förvaltningen. Mora.

Managed customer support orders for the fiber expansion in the municipality, as well as taking inventory of and mapping the municipality's green spaces.

Work at University

2023–2024 Institution for system technology - ISY, LiU, LAB ASSISTANT.

Worked part-time as a lab assistant in the basic course in automatic control.

Awards

- 2024 Was awarded Bröderna Molanders scholarship by the region of Dalarna for my studies at Linköping University
- 2022 Was awarded Torsten Wikstrand scholarship by the Rotary club for technology students in Mora.
- 2021 **Second place in Delsbo Electric**. Delsbo Electric was my bachelor's thesis, where the challenge was to build an electrically driven train and travel a given distance with as little energy use as possible. Where I was responsible for the engine management and transmission.

Computer skills

Advanced MATLAB and SIMULINK

Proficient C/C++, GITLAB, CAN COMMUNICATION and STM32

Languages

Swedish Native language

English Fluently