FILIP KRONSTRÖM

PhD-student, Robotics and Semantic Systems, Computer Science, LTH

@ filip.kronstrom@cs.lth.se   📞 070 535 85 81   ✉ Agardhsgatan 7, 223 51 Lund   📍 Lund
in linkedin.com/in/filip-kronstrom/

WORK EXPERIENCE

Teaching Assistant
Lund University

📅 September 2020-December 2020   📍 Lund, Sweden

Teaching assistant in courses at the Division of Mathematical Statistics at LTH. Involved in Introductory course to mathematical statistics, Stationary stochastic processes, and Time series analysis.

Summer Intern
Ericsson

📅 June 2020-August 2020   📍 Lund, Sweden

Developed a ROS node for 3D object detection using RGB and pointcloud as inputs. Programming in Python and C++.

Summer Undergraduate Research Fellow
California Institute of Technology

📅 June 2019-August 2019   📍 Pasadena, CA, USA

Involved with a joint project between the Control and Dynamical Systems department and the Division of Geological and Planetary Sciences at Caltech. The goal was to develop an autonomous boat for mapping of rivers. The boat navigated using LiDAR, GPS, accelerometers, and gyroscopes. The work included programming in Python and C++, development within the ROS framework, control theory, as well as real life testing of the boat. Supervised by Prof. Richard M. Murray and PhD candidate Alistair T. Hayden.

SI-Leader
Lund University

📅 Fall 2016   📍 Lund, Sweden

Supplemental Instruction (SI) Leader in "One Dimensional Analysis" (Calculus 1) at Lunds Tekniska Högskola. Planning and execution of discussion exercises in mathematics for engineering students.

EDUCATION

Doctoral Student
RSS, CS - Lund Tekniska Högskola

📅 May 2021 - ongoing   📍 Lund, Sweden

Mixed-Initiative Human Robot Interaction in a Multi-Agent setting. Supervised by Ass. Prof. Elin Anna Topp, co-supervised by Prof. Anders Robertsson and Prof. Jacek Malec.

Master's Thesis
Lund Tekniska Högskola

📅 September 2020 - April 2021   📍 Lund, Sweden

Assessment of rehabilitation from ACL injuries through video analysis using body part localisation and ensembles of neural networks. Supervised by Prof. Andreas Jakobsson.

Electrical Engineering
Lund Tekniska Högskola

📅 Fall 2015 - Spring 2021   📍 Lund, Sweden

Master with focus on control theory, statistical signal processing, and machine learning started in 2018.

VOLUNTEERING

Low Voltage Manager
Lund Formula Student

📅 August 2019 - August 2020   📍 Lund, Sweden

Responsible for the low voltage electric systems of the two formula style race cars built by Lund Formula Student 2020. This included the first ever electric car built by the Lund team. I was leading a group of 12 students working with hardware, software, sensors, and everything else needed to control a race car.

Electric powertrain prestudy
Lund Formula Student

📅 Fall 2018 - Summer 2019   📍 Lund, Sweden

Conducting a pre-study on electric powertrain to be able to build electric car 2020.

Electronics
Lund Formula Student

📅 Fall 2017 - Summer 2018   📍 Lund, Sweden

Part of the electronics team. Worked with circuit design and overall electric system of the car.