

Curriculum Vitae

Hans-Martin Heyn, Ph.D., M.Sc.

E-Mail: hey@chalmers.se

LinkedIn: <https://www.linkedin.com/in/hans-martin-hey-308461155>

GoogleScholar: <https://scholar.google.com/citations?hl=no&user=Pd5pmvQAAAAJ>



Work experience

- 01.2023 – today **Senior Lecturer / Universitetslektor**
Department of Computer Science, University of Gothenburg and Chalmers University of Technology, Göteborg
Research: Software Engineering for ML, Requirement Engineering, Functional Safety, Distributed Systems
Teaching: LEU062: Computer Communication, DAT257: Agile Software Project Management, DAT550: Software Engineering for AI
- 01.2021 – 12.2022 **Postdoctoral Researcher**
Department of Computer Science, University of Gothenburg, Göteborg
Requirement engineering for distributed AI systems; architectural frameworks for AI systems; EU Horizon 2020 project “Very Efficient Deep Learning in the IoT¹”.
Teaching in Embedded System Design (DIT632). Supervisor for thesis students.
- 08.2019 – today **Functional Safety Engineer and Function Developer**
Volvo Group Trucks Technology (Volvo GTT), Göteborg
Function Development and functional safety work for autonomous vehicle platforms and advanced driver assistance systems. Scrum Master for agile team.
Teaching courses in Functional Safety for Software (Part 6 ISO 26262) and Functional Safety for Hardware Components (Part 5 ISO 26262).
- 11.2018 – 07.2019 **System Design Engineer**
Advance Engineering of Electrical and Software Architecture
Volvo Group Trucks Technology (Volvo GTT), Göteborg
System design for future E/E architectures and work on functional safety concepts for autonomous vehicle functions (ESPLANDE² project).
- 09.2014 – 10.2018 **Ph.D. Candidate, Marine Cybernetics**
Centre for Autonomous Marine Operations and Systems (AMOS)
Norwegian University of Science and Technology (NTNU), Trondheim
Development of a distributed motion sensing system for ships.
Teaching TMR4243 Marine Control Systems Laboratory and lectures on battery diagnostics in TMR4290 Marine electric power systems. Supervisor for thesis students.
- 08.2017 – 12.2017 **Guest Researcher**
DTU Elektro, Denmark's Technical University, Copenhagen (Lyngby)
Fault-tolerant control, detection of dangerous environmental conditions on ships.
- 10.2013 – 09.2014 **Research Engineer**
E.ON Energy Research Center, Aachen, Germany
Charging algorithms for large batteries and battery fault detection.

¹ <https://www.vedliot.eu>

² <https://esplanade-project.se>

07.2012 – 11.2012 **Industrial internship**
Auckland MRI Research Group / Siemens Healthcare, New Zealand
 Automatic analysis of heart stroke volume in MR images.

Academic Details

05.2019 **Ph.D., Marine Cybernetics**
Norwegian University of Science and Technology (NTNU), Trondheim, Norway
 Ph.D. thesis: Motion Sensing on Vessels Operating in Sea Ice.

10.2013 – 03.2016 **M.Sc., Management, Business and Economics,**
RWTH Aachen University, Germany
 Master thesis: Route planning algorithm for electric logistic fleets in consideration of battery degradation.

10.2010 – 09.2013 **M.Sc., Electrical Engineering, Information Technology and Computer Engineering,**
RWTH Aachen University, Germany
 Master thesis: Adaptive State- and Parameter Estimation for Lithium-Ion Batteries.

02.2012 – 12.2012 **Studies abroad at University of Auckland, New Zealand**
 Fields of study: Embedded System Design and Image Processing.

10.2007 – 09.2010 **B.Sc., Electrical Engineering, Information Technology and Computer Engineering,**
RWTH Aachen University, Germany
 Bachelor thesis: Safety concepts for high voltage battery storage systems.

Awards

10.2007 – 09.2013 **Scholar of the Evangelisches Studienwerk e.V. Villigst**
 Scholarship by the German federal ministry of education and research and the protestant church of Germany.

Language Abilities

German	mother tongue	Python	highly skilled	NI VeriStand (RCP)	skilled
English	business fluent	Keras (Tensorflow)	skilled	SystemWeaver	skilled
Norwegian	business fluent	C and C++	skilled	Rust	skilled
Swedish	business fluent	OpenCV	skilled	Java	basics
MATLAB/Simulink	highly skilled	R	skilled		

Engagement

2022 **Organisation committee for AIRE 2022 workshop**

2021 **Organisation committee for IEEE RE 2021 conference**

2016 – 2018 **Board member of a housing cooperative (Borettslag Paul Fjermstads veg 19A)**

2015 – 2017 **Board member of NTNU's Cabin Group (NTNU Koiene)**

2010 – 2011 **National Model United Nations in New York**