



Vilmar Haraldsson

Jyllandsgade 122, 6700 Esbjerg
vilmarharaldsson@gmail.com
+45 11223344
Nationality: Icelandic
www.linkedin.com/in/vilmar-h

Engineer in intelligent reliable systems with passion for water and electrical systems

Internationally minded control and robotics engineer with work experience in industrial automation and as project leader in R&D. Reliability engineering and intelligent/optimal control was my focus in my master's, and I have done extensive academic work on underwater robotics, control engineering, and fault tolerant control. As a co-worker, I am driven, independent and thrive in a hectic work environment with room for smiles – something I also possess from being a para rescue jumper in Iceland and having worked as a first aid instructor.

IT skills

C	●●●●○	MATLAB	●●●●●	AutoCAD	●●●●●
C++	●●●●○	OpenCV	●●●●○	Solidworks	●●●●○
C#	●●●●○	EmguCV	●●●●○	Inventor	●●●●○
Java	●●●●○	Linux	●●●●○	Windows Office Programs	●●●●●
Python	●●●●●	LaTeX	●●●●○		

Education

2019-2021 MSc. In Engineering (Intelligent Reliable Systems) Aalborg University Esbjerg

Focuses on development of intelligent control systems for robotics, reliability engineering, and underwater research. Project work with real-life problems. Average Grade 10,2.

Skills: Accuracy, responsible, efficient.

My role in group work was often being initiator, systematic and a positive team player.

Projects:

- Master Thesis: Model Predictive Control for an Underwater Vehicle (working title)
Used MATLAB, mathematical modelling and optimization, Python, underwater localization
- Fault detection on the BlueROV2 using Multi Model Residual
Used MATLAB. Mathematical modelling, multi model fault detection method.
- Modelling of a Centrifugal Pump and Efficiency Control
Used real-time MATLAB, NI-DAQ, Efficiency control algorithm.

2015-2019 BSc. Electronics and Computer Engineering Aalborg University Esbjerg

Projects:

- Parameter Estimation and Model-based Control of an ROV with Imaging for Object Detection
Used MATLAB, mathematical modelling, parameter estimation, LQR, EmguCV and C#
- Modelling and Control of an Underwater Vehicle with Focus on Depth Control
Used MATLAB, force testing, mathematical modelling for dynamics and C
- Autonomous Bale Collector
Used OpenCV, trigonometry, GPS, compass, C++, and microcontrollers

Experience

2020-2021 Project Coordinator R&D LifeCraft Electronics Viking Life-Saving Equipment

I worked with the LifeCraft rescue system, a hybrid of lifeboat and life raft. I gradually got more responsibility.

Tasks:

- Supervision of LifeCraft electronics
- Development of new electronics
- EMC/E10 industry electronics approvals
- Project planning and deadlines

Skills:

- Overview of a big complex electronics project
- Connection of theory to real-world problems
- Industry standards and safety codes
- Making realistic project plans and keeping up to deadlines

2019-2020 Research Assistant**Aalborg University Esbjerg**

I worked with Model comparison of a VideoRay Pro 4 Underwater ROV - Proceedings of the 2018 IEEE/ASME International Conference on Advanced Intelligent Mechatronics.

Task:

- Working on papers to publish on underwater robotics and design of a new controller for the VideoRay Pro 4 based on my bachelor thesis.

Skills:

- Self-motivation
- Precision
- Communication

2017-2020 Bartender**The Old Irish Pub Esbjerg**

It was important for me as an international student to get a job in Denmark when I moved here – to get to know Danish working culture and practice Danish.

Tasks:

- Service
- Ordering stock and sales
- Handyman work

Skills:

- Fixing on the spot
- Money management and organization
- Communication and people skills

2015-2017 Engineering Student Job**Samey Automation Solutions, Reykjavik, Iceland**

Engineering company with focus on automations solutions for industry.

Tasks:

- Supervision of Large Project
- Cost Control for Projects
- Electrical Drawings
- Programming for HMI and PLC

Skills:

- Innovation
- Group work
- Electrical Design for Industry
- Modular Programming

Volunteer work

2019-2020 Young Professionals in Denmark

The Young Professionals in Denmark Programme is a career development programme for specially selected international master's students in Denmark. I learned about the Danish labour market and workplace culture. It has been important for me to make extra effort because I always knew that I wanted to have a career in Denmark.

2005-2016 ICE SAR – Air Rescue Service Reykjavik

First aid instructor. Para rescue jumper since 2009 with 80 jumps.

Skills:

- Public speaking and teaching
- Group work and organization
- Discipline, organization and planning

Languages

Icelandic ●●●● First language**English** ●●●○ Advanced ability**Danish** ●●○○ Understanding normal conversations, working on talking

Spare time

All over interest in electrical and computer systems including control systems. Automations of robots. I like to keep up to date with the trends in my field and industry.

In my spare time, I play rugby for Esbjerg Rugby Club and also like training and hiking. When I am not doing sports, I enjoy spending time with my friends and watch movies.

References

Available upon request