Erik Thorsell

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Experience

Jun '18–*present* **Software Developer**, Volvo GTT, Gothenburg.
I am currently helping Volvo GTT take the next step within automated trucks, buses, and construction equipment. As part of the Vehicle Automation Group, my team is tasked with (e.g.) fleet management, planning, and communication.

Jun '18–*present* **Software Developer**, HiQ, Gothenburg.
As a software developer at HiQ I have the ability to work with an abundance of customers in a wide variety of fields. Technology concerns everyone and my role is to bring my expertise and positive demeanor to our customers and help them in whatever way I can.

Sep '17–Dec '17 **Machine Learning Engineer**, Machine Intelligence Sweden, Gothenburg.
Focusing mainly on the product Science Router, a search engine that will allow for companies and researchers to find competence in accordance to their needs. I was equally involved in all steps of the development chain, from data mining to algorithm programming.

Summer 2017 **SW Development and Operations**, Volvo Cars, Gothenburg.
Was selected to be part of Volvo Cars' Engineering Student Concept (VESC) Programme. As part of the "tools team" (the tools were mainly Jenkins, Batch, Python and Matlab), I helped maintain and develop the in house "Software Factory" (SF). During the summer I, among other things, converted the Jenkins part of the SF to Declarative Pipelines and automated a series of tasks, freeing up hours for the developers.

Oct '16–Apr '17 **SW / FW Developer**, NEVS, Trollhättan.
Along side my master studies I worked for National Electronic Vehicle Sweden. My work was conducted at the SW/FW department and was concerned mostly with BMS modelling, and visualization of said models. During this period I developed a GUI for such a BMS-model, using Matlab GUIDE.

Summer 2016 **Intern**, NASA, NVI Inc., Greenbelt, MD.
During a 10 week internship at Goddard Space Flight Center I worked alongside two other interns on two software projects. Our work resulted in a new way for the VLBI groups all over the world to calculate slewing models for their antennas.
Link to work: `http://bit.ly/2c90Rv7`

Aug '14–May '16 **Supplemental Instructor**, Chalmers University of Technology, Gothenburg.
The role of a "supplemental instructor" is to help students to teach themselves by providing the students with material that challenges them, and then guide them through their work.
I have instructed all of the math courses given at the computer science program.

Education

Aug '13–Jun '18 **BSc, MSc, MScEng**, *Computer Science*, Chalmers University of Technology, Gothenburg.
I hold a BSc and an MScEng in computer science and engineering. My MSc concerned *Computer Science, Algorithms, Languages and Logic* and I concentrated my studies to machine learning, artificial intelligence and optimisation.
Theses: BSc: `http://bit.ly/2g04d3q` & MSc: `https://bit.ly/2tHBCZD`

Aug '11–Jun '12 **Team Training School West (TTS)**, Dalkarlså Community College, Dalkarlså.
A theological education with emphasis on leadership. Not only did the education cast light upon the complexity that comes with organizing a large community, I also got a better understanding of the importance of structuring my own everyday work.

Positions of Responsibility

May '17–Jun '18 **Chairman**, Chalmers Software Craftsmanship Guild, Chalmers Uni. of Technology.
Elected as chairman for Chalmers' newly founded society, focused on open source software development and capture the flag competitions.

Aug '15–May '16 **Commissioner**, The Educational Advisory Council, Chalmers Uni. of Technology.
Elected as a member of the educational advisory council at Chalmers University of Technology, responsible for the communication between the students and the professors. During my year on the council I improved my ability to "make a case", both for myself and those I represented.

Jan '15–May '16 **Student Ambassador**, Chalmers Com & Ad, Chalmers Uni. of Technology.
As an ambassador for Chalmers University of Technology I attended exhibitions and schools representing both Chalmers and my program of study, Computer Science. I was able to work more on my "public speaking skills" and to "sell my school and program".

Computer skills

Python 
My language of choice. Common scripting language at Volvo, and the language used for the second project during my internship at NASA.

Haskell 
Wrote a type checker and interpreter, as well as a code generator, in Haskell for the course Programming Language Technology.

Tensorflow 
Tensorflow has come to be my machine learning library of choice when doing for instance image classification and reinforcement learning.

Matlab 
Familiar with the basics of Matlab. Also have experience with GUIDE, in which I developed a GUI for a BMS-model at NEVS.

Fortran 

During my internship at NASA this was the main language used as we rewrote the I/O part of Calc/Solve.

Typescript 

Together with four other students, I wrote an AI similar to Shrdlu, in the course Artificial Intelligence.

Java 

Most commonly used language during my B.Sc. in which I for instance have implemented a genetic algorithm for a game theoretical model, which plays the prisoner's dilemma on a 64×64 lattice.

Scripting 
If I find myself doing a task more than once I will look into the possibility of scripting said task. These scripts I often write in Bash, but I also have experience with Windows Batch Scripting.

Operating Systems Comfortable using: Linux, macOS, BSD and Windows.

Certificates Cisco Certified Networking Associate (CCNA) Routing and Switching version 5.0

Languages and Licenses

Languages **Swedish** – Mother tongue
English – Professional proficiency
German – *Used to know it, somewhat well*

Licenses MC/Car: AM/A1/A2/B
Fork Lift: A2/A4/B2