

Felix Mattsson

Summary

I am a 25-year old, quite newly graduated student, currently working as a data scientist with a focus on innovation at Volvo Cars! I studied at Chalmers university of technology, where I studied engineering physics (sv. teknisk fysik) with a master in engineering mathematics. In my master I learned a lot about statistics, programming, calculations and machine learning. I want to work with data science, data analysis, applied mathematics, statistics, machine learning, big data, programming and similar things. I want to use my problem-solving skills and analytical thinking to make a good impact on society, while at the same time follow my passion for learning and developing.

Education

2015-2021 Master of Science in Engineering physics (sv. Civilingenjör i Teknisk fysik),

Chalmers University of Technology, Gothenburg.

Courses in: physics, mathematics, programming

2018–2021 Master programme: Engineering Mathematics and Computational Science,

Chalmers University of Technology, Gothenburg.

The courses I have taken that I find most relevant to what I want to work with:

Algorithms for machine learning and inference 7.5 hp

Statistics for big data 7.5 hp

Statistical inference 7.5 hp

Algorithms 7.5 hp

Nonlinear optimization 7.5 hp

High performance computing 7.5 hp

Work Experience

Full-time work

2021-ongoing Data Scientist, Volvo Cars via Nexer Group, Gothenburg.

Working as a data scientist with focus on innovation within my organization, meaning I am working with making data avaliable and finding efficient solutions for my organization, so that my colleauges can work in a more data-driven and systematic way.

Raketgatan 8 - 41320 Gothenburg - Sweden 2021 **Algorithm developer**, *Syntronic Research and Development*, Gothenburg. **Projects**

Time series forecasting (for sales demand): I developed a framework for modelling forecasts of time series of company sales, to be used for planning and logistics. Developed in python using git

Summer internships

2019 Machine learning intern, Bokio, Gothenburg.

I developed a machine learning-algorithm based on the K-means method for provider detection in invoices. Developed in python.

2018 Computations engineer, Scania, Södertälje.

Simulated electrical engine-noise using the software MANATEE (Magnetic Acoustic Noise Analysis Tool for Electrical Engineering) to explore the software and find vital parameters for noise reduction. Worked with the software MANATEE, which is based on MATLAB.

2013-2015 Sports camp leader, Scania Sports Camp, Södertälje.

Taught sports and games to children in ages 7-13 years.

Part-time Jobs

2019-2021 **Teaching assistant. Mathematics**, *Chalmers*, Gothenburg.

Part-time job where I am in charge of excercise classes in mathematics at Chalmers

2016-2017 **Tutor for highschool students**, *MyAcademy*, Gothenburg.

Part-time job where I taught mathematics and physics to highschool students.

Other Projects

2020 **Master thesis: Molecular optimization using deep learning**, *AstraZeneca*, Gothenburg.

Improved a deep learning network for molecular optimization, previously developed on AstraZeneca which was based on natural language processing methods and used to find molecules with potential in drug discovery. Worked with python, git and AstraZeneca:s scientific computing platform.

- 2019 **Project course in mathematical and statistical modelling:**, *Volvo*, Gothenburg. I analyzed traffic data to model the probability of critical traffic scenarios (i.e crashes) using extreme value theory. Worked in python.
- 2018 **Bachelor thesis: Compendium in special theory of relativity**, *Chalmers*, Gothenburg.

Me and 4 other students wrote a compendium about the subject special relativity in physics which acts as the course litterature in a course on the subject at Chalmers. the book is called "An introduction to special relativity". It was written in LaTeX.

Volounteering

2017-2018 Mentor, Intize, Gothenburg.

Taught mathematics to highschool students.

Skills

Languages Swedish, English, some Spanish (level B2).

Tools Python, Matlab, R (Basic), Git, SQL (Basic).

Describing Rational, Social, Helpful, Eager-to-learn, Patient, Empatic, Curious, Analytwords ical, Systematic.

Other Merits

Effective Altruism Chalmers organizer.

I am a part for the student union society Effective Alturism Chalmers, where I am organizing events.

Exchange studies, Barcelona.

Studied and lived in Barcelona during the autumn 2018.

Grant Sancta Ragnhilds Gille.

The grant was given to students with good grades from Södertälje who studies at university level.

Drivers **B** licence

Separate Courses

HT 2021	Python programming and artificial int	elligence , <i>University of Gothenburg</i> , 5 hp.
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- HT 2017 Programming in C, University of Gothenburg, 7.5 hp.
- VT 2018 Theoretical Philosophy: Introductory Course, University of Gothenburg, 30 hp.
- HT 2020 Functional analysis, Chalmers, 7.5 hp.
- HT 2021 **Statistical thinking**, *University of Gothenburg*, 7.5 hp.
- HT 2016 Logic: Formal languages, *University of Gothenburg*, 7.5 hp.
- HT 2016 Logic: Modal logic, University of Gothenburg, 7.5 hp.
- VT 2017 Logic: Completeness and Decidability, University of Gothenburg, 7.5 hp.
- HT 2017 Logic: Set theory, University of Gothenburg, 7.5 hp.