

ARASH DARAKHSH

Software Developer / Machine Learning Engineer / Data Scientist
Chalmers Graduate - M.Sc. Complex Adaptive Systems

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ABOUT ME

Physicist and programmer with a big interest in machine learning and automotive engineering. Problem solver, technology nerd, chess enthusiast and avid Formula-1 fan.

WORK EXPERIENCE

Associate Research Engineer

GKN Aerospace Sweden AB

2024, March-October Trollhättan, Sweden

- Deep Learning & Computer Vision
- Full pipeline in developing deep learning models for industrial applications

Summer Job - Software Developer

GKN Aerospace Sweden AB

2023, June-July - 5 weeks Trollhättan, Sweden

- Continuous integration of ML models

Summer Job - Assistant Plumber (VVS)

Kungälv's rörläggeri AB

5 summer breaks during 2014-2021 Gothenburg, Sweden

- Construction from schematic drawings
- Installation of radiators, drainage systems, bathrooms, heat pumps, water pipes etc.

EDUCATION (4.4/5.0 GPA)

M.Sc. Complex Adaptive Systems - MPCAS

Chalmers tekniska högskola

2021-2023 Gothenburg, Sweden

- Topics: Deep learning, computer vision, neural networks, statistics, optimization, data structures & algorithms
- Master's Thesis

B.Sc. Engineering Physics - TKTFY

Chalmers tekniska högskola

2018-2021 Gothenburg, Sweden

- Topics: Mathematical analysis, theoretical physics, experimental physics, programming, statistics
- Bachelor's Thesis

PORTFOLIO / HOBBY PROJECTS

- RST - Road Segmentation Tool
- ACL - Autonomous Active Learning
- Stochtimizer - Stochastic Optimization Library
- C-GEMM - C++ General Matrix Multiplication

PROGRAMMING

Language	Experience
Python	Deep/Machine learning, data science, applications, personal projects and master thesis.
C/C++	Algorithms, memory management and high performance computing (HPC).
Matlab	Computational physics, numerical simulations and statistics.
MySQL/SQLite3	Data tabulation, online bot user logging and querying.
LabVIEW	Experimental physics and sensor acquisition.

SKILLS

- Mathematics
- Physics
- Statistics & Big data
- AI
- Machine learning
- Deep learning
- PyTorch
- Tensorflow
- Keras
- Scikit-learn
- OpenCV
- Computer vision
- Data structures & Algorithms
- NLP
- LLM
- RAG
- Docker
- MLFlow
- MLOps
- Windows
- Linux
- Vim
- LaTeX
- Git
- Powerpoint
- Excel
- Electronics & EM
- Experimental physics
- Swedish Citizen
- B-license

LANGUAGES

- Swedish Fluent, Native (citizen)
- English Fluent, B2
- French A2

RELEVANT COURSES

- Complete Course List
- Algorithms For Machine Learning and Inference
- Advanced Machine Learning with Neural Networks
- Machine Learning for Natural Language Processing
- Mathematical statistics
- Statistical Learning for Big Data
- Data Structures and Algorithms
- Artificial Neural Networks
- High Performance Computing
- Image Processing
- Stochastic Optimization Algorithms