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)

Kungälvs rörläggeri AB

📅 5 summers 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	Personal projects, machine learning and master thesis.
C/C++	Memory management and high performance computing (HPC).
Matlab	Computational physics, numerical simulations and statistics.
MySQL/SQLite3	Basics of data tabulation, online bot user logging and querying.
Java	Introduction to programming and object oriented programming.
LabVIEW	Experimental physics and sensor acquisition.

SKILLS

Mathematics • Physics • Statistics • Machine learning • Deep learning • PyTorch • Tensorflow Keras • Scikit-learn • OpenCV • ML • CV • NLP • HPC • Big data • Docker • MlFlow • MLOps • Windows • Linux • Vim • LaTeX • Git • Powerpoint • Excel • Electronics & EM • Experimental physics • B-license

LANGUAGES

Swedish	Fluent, Native
English	Fluent, B2
French	A2

RELEVANT COURSES

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