ARASH DARAKHSH

Chalmers Graduate - M.Sc. Complex Adaptive Systems

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EDUCATION

M.Sc. Complex Adaptive Systems - MPCAS
Chalmers tekniska högskola
📅 2021-2023   📍 Gothenburg, Sweden

B.Sc. Engineering Physics - TKTFY
Chalmers tekniska högskola
📅 2018-2021   📍 Gothenburg, Sweden

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.

PROJECTS

Master's thesis - *Domain Validation and Continuous Improvement of Industrial Deep Learning Models*
📅 2023, 6 months   📍 GKN Aerospace Sweden AB, Trollhättan

- Deep learning, defect detection, industry 4.0

Bachelor's thesis - *Karakterisering och spårning av nanopartiklar med djupinlärning*
📅 2021, 6 months   📍 Chalmers, Gothenburg

- Deep learning, computer vision, object detection

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.

RELEVANT COURSES

Complete Course List (Hyperlink)
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

SKILLS

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

LANGUAGES

Swedish   Fluent, Native

English   Fluent, B2

Farsi   Fluent

French   A2