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

High School - Technology & Design
Polhemsgymnasiet
📅 2015-2018   ⦿ Gothenburg, Sweden

WORK EXPERIENCE

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*
Supervisors: Philipp Westphal & Edvard Svenman
📅 2023
- Deep learning, defect detection, industry 4.0

Bachelor's thesis - *Karakterisering och spårning av nanopartiklar med djupinlärning*
Supervisors: Daniel Midtvedt & Benjamin Midtvedt
📅 2021
- Deep learning, computer vision, object detection

⊙ Hobby projects

⊙ **RST - Road Segmentation Tool**

⊙ **MNIST Maker - MNIST Dataset Generator**

⊙ **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

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

Mathematical analysis   Physics

Statistics   Machine learning   Deep learning

PyTorch   Tensorflow Keras   Scikit-learn   OpenCV

CV   RL   NLP   HPC   Big data

Windows   Linux

Vim   LaTeX   Git   Docker

Electronics & EM   Experimental physics

CAD & FEM   B-license

LANGUAGES

Swedish	Fluent, Native
English	Fluent, B2
Farsi	Fluent
French	A2