

ARASH DARAKHSH

Chalmers Graduate - M.Sc. in Engineering Physics - Complex Adaptive Systems

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Arash-Darakhsh

Darakhsh1999

Gothenburg, Sweden



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)

Kungälv's 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

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

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

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
Electronics & EM Experimental physics
Solidworks & FEM B-license

LANGUAGES

Swedish Native

English B2

Farsi Fluent

French A2