

ARASH DARAKHSH

Chalmers Graduate - M.Sc. Complex Adaptive Systems

@ darakrash@protonmail.com

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

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 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

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