







ARASH DARAKHSH

Machine Learning Engineer / Data Scientist / Software Developer
Chalmers Graduate - M.Sc. Complex Adaptive Systems

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 Gothenburg, Sweden

About me

Physicist and programmer with a big interest in machine learning and automotive engineering. My biggest strengths are computer vision (CV) and natural language processing (NLP). Problem solver, technology nerd, chess enthusiast and avid Formula-1 fan.

Work Experience

Associate Research Engineer & M. Thesis


GKN Aerospace Sweden AB

 January 2023 - October 2024  Trollhättan, Sweden

- Python, PyTorch, openCV, Scikit-learn
- Deep Learning & Computer Vision
- Full pipeline in developing deep learning models (CNN & Transformers) for industrial applications

Summer Job - Software Developer



GKN Aerospace Sweden AB

 Summer 2023  Trollhättan, Sweden

- Continuous integration of ML models

Summer Job - Assistant Plumber (VVS)

Kungälv's rörläggeri AB

 5 summer breaks 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 and statistics. **Bachelor's Thesis**

Portfolio / Hobby projects

 OpenAI Generative Pretrained Transformer (GPT2) from scratch

 RST - Road Segmentation Tool

 ADAS U-Net road segmentation

 ACL - Autonomous Active Learning

 C-GEMM - C++ General Matrix Multiplication

Programming

Language	Experience
Python	Deep/Machine learning, data science, data visualization, statistics, applications, APIs and personal projects.
C/C++	Algorithms, memory management, GPU (openCL), vector intrinsics, optimization and high performance computing (HPC).
Matlab	Computational physics, Simulink, numerical simulations and statistics.
MySQL/SQLite3	Data tabulation, vector DB, online bot user logging and querying.
LabVIEW	Experimental physics and sensor acquisition.

Skills & Merits

Mathematics

Physics

Statistics & Big data

AI

Machine & Deep learning

Computer vision

Python

C++

Data structures & Algorithms

PyTorch

Tensorflow Keras

Scikit-learn

OpenCV

Windows

Linux

CI/CD

Git

AWS

Docker

MLFlow

MLOps

TensorRT

FastAPI

REST API

NLP

Generative AI

LLM

RAG

AI Agents

Hugging Face

LlamaIndex

LangChain

OpenAI API

Swedish Citizen

B-license

Languages

Swedish Fluent, Native (citizen)

English Fluent, B2

French A2

Relevant courses

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