ARASH DARAKHSH

AI Engineer / Data Scientist / ML Engineer
Chalmers Graduate - M.Sc. Data Science & AI

@ darakrash@protonmail.com · in Arash-Darakhsh · ◯ Darakhsh1999 · 🌐 Personal Website
📍 Gothenburg, Sweden

About me

Physicist and programmer with a big interest in machine learning, automotive engineering and AI Agents. Deep knowledge and experience in implementing computer vision (CV) and large language models (LLMs). Problem solver at heart, technology nerd, chess enthusiast and avid Formula-1 fan.

Work Experience

Associate Research Engineer & M. Thesis 🔗
GKN Aerospace Sweden AB

📅 January 2023 - December 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)
Kungälvs 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 (Data Science & AI) - MPCAS
Chalmers tekniska högskola 🏛

📅 2021-2023 📍 Gothenburg, Sweden

- Topics: Deep learning, computer vision, neural networks, statistics, optimization, data structures & algorithms. **M.Sc Thesis** 🔗

B.Sc. Engineering Physics - TKTFY
Chalmers tekniska högskola 🏛

📅 2018-2021 📍 Gothenburg, Sweden

- Topics: Mathematical analysis, theoretical physics, experimental physics, programming and statistics. **B.Sc. Thesis** 🔗

</> Portfolio projects </>

- ◯ | 🐍 OpenAI GPT2 from scratch
- ◯ | 🐍 Road Segmentation Tool
- ◯ | 🐍 ADAS U-Net road segmentation
- ◯ | 🐍 Autonomous Active Learning
- ◯ | 𝗖 General Matrix Multiplication

Programming

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).

MySQL 🛢
Data tabulation, vector DB, online bot user logging and querying.

R Ⓡ
Statistical analysis, Regression, machine learning, data visualization, data manipulation, feature selection and time series analysis.

HTML 🆕 **/ CSS** 🆕 **/ JS** 🆕
Fullstack, frontend apps, websites, landing pages, npm, NodeJS, React.

Skills & Merits

AI · Machine & Deep learning · Computer vision
Mathematics · Physics · Statistics & Big data
Python · C++ · Fullstack · DS & Algorithms
PyTorch · Tensorflow · Scikit-learn · OpenCV
Windows ⊞ · Linux 🐧
CI/CD 🔄 · Git ◆ · AWS 🅰 · Docker 🐳
MLFlow · MLOps · TensorRT
FastAPI · MCP · REST API
NLP · Generative AI · LLM · RAG · AI Agents
HuggingFace · 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
Artificial Neural Networks
High Performance Computing
Image Processing