

# ARASH DARAKHSH

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

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 Personal Website    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

### GKN Aerospace Sweden AB


Associate Research Engineer & M. Thesis 

 January 2023 - December 2024    Trollhättan, Sweden

In charge of full pipeline in developing computer vision and deep learning models for industrial applications in the domain of computer vision.

[Python, PyTorch, openCV, Scikit-learn]



Summer Internship - ML Engineer 

 Summer 2023

Implemented results from Master thesis. Continuous integration of ML models into a HMI-applicable system. [Python, PyTorch]

### Kungälv's Rörläggeri AB

Summer Job - Assistant Plumber (VVS)

 5 summer breaks during 2014-2021    Gothenburg, Sweden


- Construction from schematic drawings. Installation of radiators, drainage systems, bathrooms, heat pumps, water pipes etc. Hands-on work with tools and machines.

## Education (4.4/5.0 GPA)

M.Sc. Complex Adaptive Systems (Data Science & AI)

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

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
-  |  Multi-Agent Data Analytics System
-  |  Scientific Article RAG Application
-  |  Formula-1 MCP Server
-  |  ADAS U-Net road segmentation

## 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

Windows 

Linux 


PyTorch


Scikit-learn


OpenCV


Fullstack

DS & Algorithms

CI/CD 

Git 

AWS 

Docker 

MLFlow

MLOps

FastAPI

MCP

REST API

NLP

Generative AI

LLM

RAG

AI Agents

HuggingFace

LangGraph

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