





# ARASH DARAKHSH


AI Engineer / ML Engineer / Data Scientist  
Chalmers Graduate - M.Sc. Complex Adaptive Systems

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 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)

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 projects </>

-  |  OpenAI GPT2 from scratch
-  |  Road Segmentation Tool
-  |  ADAS U-Net road segmentation
-  |  Autonomous Active Learning
-  |  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).
MySQL	Data tabulation, vector DB, online bot user logging and querying.
HTML/CSS/JavaScript	Fullstack, frontend apps, websites, landing pages, npm, NodeJS, React.
Matlab	Computational physics, Simulink, numerical simulations and statistics.

## Skills & Merits

AI	Machine & Deep learning	Computer vision
Mathematics	Physics	Statistics & Big data
Python	C++	Fullstack
PyTorch	Tensorflow	Scikit-learn
Windows	Linux	
CI/CD	Git	AWS
MLFlow	MLOps	TensorRT
FastAPI	MCP	REST API
NLP	Generative AI	LLM
HuggingFace	LlamaIndex	LangChain
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