





ARASH DARAKHSH


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


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 Arash-Darakhsh

 Darakhsh1999

 arashdarakhsh

 Personal Website

 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 & Transformer) 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

-  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, applications, personal projects and master thesis.
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, online bot user logging and querying. Vector database for word embeddings.
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

NLP

Generative AI

LLM

RAG

AI Agents

Hugging Face

OpenAI

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
Data Structures and Algorithms
Artificial Neural Networks
High Performance Computing
Image Processing