Machine Learning Internship

ExSeed Health remote

Field: Machine Learning & Computer Vision

• Mining features (segmentation and tracking) of human sperm cells and analysis of sperm quality.

• Using PyTorch, OpenCV, CVAT for model development and AWS (SageMaker, DynamoDB and S3) for model deployment.

Data Science Associate

Aug 2023 - Dec 2023

Jan 2024 - present

Meddoc Flow ApS.

remote

Field: Machine Learning & AI

• Developed back-end scripts in Python to get Medical Device Regualtion queries and find the answer using vector embeddings and similarity search in Milvus.

PhD student

Sep 2021 - writing phase

Department of Clinical Medicine, Aarhus University

Aarhus, Denmark

Field: Machine Learning & Hypertension

Status: All data collected and analyzed. I am finishing writing the thesis in my spare time.

• Developed new time-series analysis of contrast for laser speckle contrast imaging (LSCI) and improved the optical system.

Machine Learning internship

Jul 2019 - Sep 2019

Telefónica Alpha, Health Moonshot

Barcelona, Spain

Field: Machine Learning & Human Computer Interaction

• Performed data exploration and correlation analysis of behavioural data coming from phone sensors, electrodermal activity from empatica's wristband and self reported questionnaires from the phone.

Marie Curie Early Stage Researcher

Mar 2017 - Apr 2020

Department of Computing Science, University of Glasgow Field: Machine Learning & Human-Computer Interaction

 $Glasgow,\ Scotland$

• Developed novel algorithms in Python and Matlab to map electrodermal activity to vibrotactile cues using self-organizing maps, clustering, and psychophysics.

Biomedical Engineer

Mar 2015 - Apr 2017

Max-Plank Institute for Metabolism Research

Cologne, Germany

Field: MRI & fMRI analysis

• Applied segmentation algorithms to MRI images.

• Investigated sources of noise with ICA analysis, which resulted in the successful debugging and completion of the project.

Machine Learning Research Fellowship

Mar 2013 - Apr 2014

Department of Mathematics, University of Barcelona

Barcelona, Spain

Field: Machine Learning & Atherosclerosis

• Implemented new metrics and alignment algorithms based on the Haussdorf distance and the SIFT method for the alignment of Intravascular Ultrasound sequences.