Frederik Gram Kortegaard

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Professional Profile

Creative developer with a passion for data analysis, machine learning and finance. Professional experience working with Deep Learning, Natural Language Processing (NLP), Computer Vision and microservices.

Skills

Programming languages:

C/C++, Python (8 yrs),
Java, Javascript,
PHP, Golang,
Lua, C#.

Systems / Tools:

Unix/Linux, Windows, Git,
Docker, Kubernetes, Elastic,
SQL, AWS, Kibana, REST.

Expertise:

Machine Learning Algorithms

Natural Language Processing

Quantitative Data Analysis

Computer Vision Algorithms

Deep Learning and Framework Engineering

Data Science specifics:

NumPy, SciPy, Pandas, SpaCy, PyTorch,
OpenCV, Prodigy, NLTK, Scikit-Image,
TensorFlow, Scikit-Learn, MatPlotLib

Work Experience

Universal Robots

- Data Analyst **(** *Machine Learning* **)** (February 2020 - Current)

At Universal Robotics, I am currently employed in the Research and Development department, focusing on Data Analysis and Machine Learning. Currently, no further information can be disclosed as to comply with both my NDA and the nature of my, currently short, employment duration.

Findwise AB

- Junior Technical Consultant **(** *Machine Learning* **)** (January 2019 - February 2020)

At Findwise I created and implemented Machine Learning and Natural Language Processing based micro-services into our data analysis pipeline using REST architectures, serving primarily as a part of our GDPR-compliance product chain.

In connection to this, I built and trained numerous Neural Networks using the SpaCy and Prodigy libraries and further designed Computer Vision algorithms and techniques to find and extract relevant metadata from various non-trivial file types. From this, I expanded my knowledge base not only in regards to the workflow and process of enterprise development, but also scalable and maintainable architecture and the tools thereto.

Featured Personal Projects

Descriptive Image Search Engine

- Created a search engine that allowed users to search a given database of images by describing the images using conversational language.
- Developed a mixture of Computer vision and Machine learning based analysis tools to detect and recognize objects in images
- Utilized natural language processing technologies to create and optimize dynamic search features on the platform
- Built a modular backend platform that could be seamlessly integrated into frontend image galleries.

Automated Stock Trading and Analysis Platform

- Developed a time series analysis tool for matching patterns and assessing similarity of datasets over different value- and timeframes using Dynamic Time Warping (abbr. DTW)
- Used sentiment analysis to create correlation statistics for stocks
- Created secure functions to handle automatic online transactions of multiple currencies across different platforms

Social Media Automation, Growth and Sentiment Analysis

- Automated social media content creation and publishing using a self-developed Python based platform
- Developed a custom API to interface with large scale social media sites
- Grew a social media profiles follower base by 457% over a four day period using said software
- Setup data pipelines using relevant APIs to automatically gather, clean and format large datasets with Python
- Implemented the Python Natural Language Processing Toolkit (NLTK) to automate dynamic sentiment analysis of keywords to hyper personalize and improve ratings of published content

Education

University of Southern Denmark, Odense. (2019 - Current)

- Bachelor of Computer Science, B.Sc. CS, (Datalogi)

VUC Syd, Haderslev . (2017 - 2019)

- A - level Mathematics, Biology and Chemistry.