Xavier Weber

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www.github.com/Saafke

Personal Profile

Driven software engineer with a passion for artificial intelligence and computer vision. Seven months of industry experience at two highly respected organisations. Keeps up-to-date with the latest research in artificial intelligence. Hopes to build cutting-edge computer vision products.

Education

Queen Mary, University of London • London, United Kingdom — September 2019 – Present
Master of Science • *Artificial Intelligence* • Current GPA: 86.4/100

- Coursework includes advanced robotics, artificial intelligence, computer vision, data mining, machine learning and natural language processing.
- Thesis: Instance-level 6D Pose Estimation

Maastricht University • Maastricht, Netherlands — September 2015 – July 2019
Bachelor of Science • *Data Science and Knowledge Engineering*

- Coursework includes machine learning, data structures and algorithms, software engineering, computer science, linear algebra and multi-variable calculus.
- Thesis: Semantic Structure Extraction on Deformed Documents via Fully Convolutional Networks

University of Sydney • Sydney, Australia — July 2017 – November 2017
Exchange program

- Coursework includes distributed systems and network principles, programming languages and paradigms, IT security, data analytics.

Work Experience

Student Developer – Google Summer of Code 2019 with OpenCV — May 2019 – August 2019
Remote

- Implement the Super Resolution (SR) models from two popular research papers in TensorFlow and reproduce their results. These vastly outperform previous SR models in the OpenCV library in speed and accuracy.
- Collaborate with other software engineer to create an intuitive interface in C++. This allows users to employ powerful SR models in only a few lines of code.
- Add loading code for three popular SR datasets into the OpenCV codebase.

Deep Learning Intern – Naver Corporation — June 2018 - October 2018
Seongnam-si, South Korea

- Implement state-of-the-art model (backbone is stacked U-net) from a research paper in PyTorch for the task of deformed document rectification and reproduce their results.
- Program a script to automatically render randomly deformed documents to use as synthetic training data.
- Conduct research in the effectiveness of this model by running outputs through a page segmentation algorithm and conclude the model needs more post-processing.
- Implement sequence-to-sequence NLP model from a research paper.

Technical Skills

- **Programming languages.** Proficient in Java and Python; familiar with C++, R, MATLAB; have used Prolog, C, Lisp and HTML.
- **Other technologies.** Pytorch, Tensorflow, Keras, Git, OpenCV, numpy, scikit-learn, scipy, Panda, Linux, ROS.

Certifications

- Deep Learning Specialization | Coursera
- Introduction to Augmented Reality and ARCore | Coursera
- Computational Neuroscience | Coursera

Additional Information

- **Languages.** Fluent in Dutch and English.