Matthew E. Struble

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Skills

Languages: Python, C++, C, SQL, Java, Bash, LaTeX.
Packages: TensorFlow, Keras, OpenCV, NumPy, Scikit-Learn, Pandas, Matplotlib.
Applications: AWS, Kubeflow, Docker, Jenkins, Airflow, Jupyter, MATLAB, Git, Neovim.

Experience

Lead Software Engineer - AI/ML — Nike
Feb 2021 - Present — Boston, MA

- Planned, designed, and performed, multiple cross-team software migrations into AWS SageMaker.
- Optimized PySpark pipelines, drastically reducing model training and inference time, and improving overall model accuracy.
- Developed a standardized Python package for AWS, logging, and test reliability, to reduce Data Scientist overhead within AWS environments.
- Led the initiative to update repositories and defined engineering best practices, reducing development time and increasing CI/CD reliability within Jenkins.
- Onboarded and supported offshore team by running agile ceremonies and creating documentation on engineering standardization, expectations, and software redesign.
- Designed, and implemented, transition from batch file processing to a new API endpoint for forecasting models.

Mission Critical Software Engineer — (Under Contract To) Draper
Mar. 2019 - Jun. 2020 — Cambridge, MA

- Developed data analytics tools with machine learning algorithms to assist engineers with hardware analysis.
- Processed system data, sensor data, and real time flight data in order to improve GNC algorithms.
- Took on responsibilities of Scrum Master and led CI/CD initiative.

Senior Software Engineer — (Under Contract To) Raytheon
Oct. 2018 - Mar. 2019 — Tewksbury, MA

- Implemented signal processing algorithms, and time critical control functions, involved in direct control of sensor systems.

Projects

Deep Learning Photo Aesthetics: Researched modern classification models, and developed supporting tools, in order to create a novel deep learning model to classify photo aesthetics.

Heineken® AR Cheers Campaign: Created an object detection model on AWS for an adaptive AR experience.

Analyzing Climate Change Stance Through Twitter Data: Tested multiple NLP algorithms like bag of words, ensemble, and BERT, in an attempt to understand – and visualize – Americans' views of climate change over time.

See blog and more projects at struble.dev

Education

Georgia Institute of Technology — Atlanta, GA
Master of Science, Computer Science |
Machine Learning, Computational Perception and Robotics

Champlain College — Burlington, VT
Bachelor of Science, Game Programming | *Minor*: Mathematics