Quinn Meyer

Website || LinkedIn || GitHub || Saginaw, MI

EDUCATION

Master of Science in Data Analytics………………………………………………………………December 2022
Western Governor's University, Salt Lake City, UT

Bachelor of Science in Mechanical Engineering……………………………………………………… 2018
Purdue University, West Lafayette, IN

SKILLS

Programming Languages: Python, SQL, MATLAB, HTML
Python Packages: Jupyter, Numpy, Pandas, Scikit-Learn, OpenCV, Pillow, Plotly, Tensorflow, Keras
Tools & Methodologies: Tableau, Git, Jira, ETL, Machine Learning, Deep Learning, Natural Language Processing, Signal Processing, Database Design, Data Visualization, Data Analysis, Microsoft Office

EXPERIENCE

Aptiv   Troy, MI
Camera Systems Engineer   September 2018 – April 2022

- Remotely led a global team of engineers to launch and validate intrinsic calibration software for manufacturing and achieved a cycle time below 60 seconds per unit for multiple optical paths at 100k+ cameras per year in less than 6 months as a critical path
- Technical lead for novel intrinsic calibration verification software in Python referencing publicly available white papers with a newly implemented distortion model at a cycle time of under 60 seconds per unit
- Developed metrological testing algorithm to assess camera model accuracy on the order of 2 millimeters at 20 meters range for verification of Aptiv's global intrinsic calibration manufacturing process
- Led a data analytics study on the DAT2.0 camera module using classification techniques to improve standard deviation of MTF measurements in a validation environment by 0.03 MTF at 0.25 cycles/pixel
- Interfaced with automotive lens, sensor, image quality, lens quality, and camera alignment suppliers as well as OEM customers as a technical expert to assess camera quality and to perform root cause analysis
- Implemented a novel white paper method in Python to objectively test for image sensor perceptiveness through use speckle interferometry and signal processing techniques to objectively assess sensor MTF
- Developed Python API with Solidworks to ensure camera field of view and boresight error fits within dimensions of a bracket for mechanical engineers to reference during design
- Developed neural net models using Tensorflow / Keras to detect and segment camera targets in highly distorted raw images and implemented these models into image processing software
- Collaborated to develop a custom camera alignment machine to align cameras using a six-axis robot, intermediate optic, active adhesive curing, and optimization software based on focus scores
- Operated as a full-stack engineer developing image processing tools to measure image quality metrics using focus score, SNR, demosaicing, RAW images, color calibration, dark noise, etc.

Rolls-Royce   West Lafayette, IN
Capstone Project   Spring 2018

- Worked with a small team of engineers to design, source, fabricate, code, and launch a robust automated test fixture for simulating the forces distributed onto a jet turbine in under six months
- Deployed the project 25 percent under budget and ahead of scheduling with the text fixture currently being used in the Rolls-Royce research and development facility in West Lafayette