**Quinn Meyer**

[quinnmeyer.com](https://quinnmeyer.com/)

Saginaw, Michigan • 2604137437

Email: qmeyer1995@gmail.com

LinkedIn: [LINK](https://www.linkedin.com/in/quinn-meyer-27b4b51a3/)

Github: [LINK](https://github.com/Kwintonium)

**EXPERIENCE**

**Data Scientist – Camera Systems and Operations 2018 - 2022**

**Aptiv,** Troy, Michigan

*Merging Math & Machine Learning for Automotive Manufacturing Applications*

* Used unsupervised learning (**K-Means Clustering, MATLAB**) to create new testing process that identified cameras likely to fail temperature trials, reduced product engineering design cycle by 2-4+ weeks.
* Developed object detection algorithm (**Python, Tensorflow, Neural Network, OpenCV**) to automate detection of optical targets during testing, reduced data post-processing and manual work time by 95%.
* Built new objective function and optimization algorithm (**Python**) to calibrate cameras for Computer Vision applications, increased calibration accuracy while reducing time, saving the company $500k+.
* Created new way to quantify image sensor performance, leveraged Fourier Signal Processing to determine focus score (**Python, Pandas, Numpy**), used to reduce camera failure investigation time by 2-4 weeks.

*End-to-End Software Development to Support Testing & Operations*

* Collaborated with cross-functional teams to define metrics and measure camera performance, analyzed competitor landscape (**Excel**) to set establish acceptance criteria and offer competitive products.
* Created end-to-end software package (**MATLAB**) for deployment in manufacturing process to automate testing and data collection, ensured cameras met specification on metrics such as Focus Score, etc.
* Analyzed test & manufacturing data (**Python, MATLAB**) to validate new camera testing methods that used less space on the factory floor, reduced cost of testing by 92%.
* Designed and deployed custom objective function optimization algorithm (**MATLAB**) to calibrate camera alignment on custom testing rig, reduced annual hardware and maintenance costs by $300K+.
* Built data pipelines and storage methodology to ingest and clean (**Python**) testing and calibration data.
* Acted as project manager and liaison with customers, gathered requirements, translated business needs into technical requirements, and gave presentations to technical / non-technical stakeholders / customers.
* Developed integration with 3rd party software (**Python, Solidworks**) to automatically design structural hardware, ensuring product met vision requirements, reduced development program delay by 4+ weeks.

**PROJECTS**

**Prioritizing Map Objectives to Maximize Wins in League of Legends (**[**LINK**](https://nbviewer.org/github/Kwintonium/League-of-Legends-Analysis/blob/main/League_Analysis.ipynb)**)**

*As an avid League of Legends player, I’ve seen how different teams have various strategies in how they approach objectives across the map. Here, I use data (machine learning) to understand if map objective prioritization can impact the ability to win a game and use these insights to build new strategies.*

* Conducted exploratory data analysis (**Python, Pandas**) from game records (10K+ records), quantified player actions and identified the most commonly sought-after objectives and order.
* Experimented with machine learning models (**Python, SkLearn, Logistic Regression, Random Forest**) and leveraged L1 regularization to reduce overfitting, built final model with 90.2% accuracy.
* Surfaced insights on key map control areas to maximize likelihood of win, built new strategies surrounding controlling the southern-most part of the map as critical objective to victory.

**EDUCATION**

**Western Governor’s University**, Salt Lake City, UT **Dec 2022**

**Master of Science – Data Analytics, GPA:** 4.0 / 4.0

**Relevant Coursework:**  Data Mining, Predictive Modeling, Exploratory Data Analysis, Data Acquisition

**Purdue University**, West Lafayette, IN **May 2018**

**Bachelor of Science – Mechanical Engineering, GPA:** 3.6 / 4.0

**SKILLS & CERTIFICATIONS**

**Programming:** Python (Pandas, SkLearn, Tensorflow, Numpy, Keras, Pillow), R, SQL, MATLAB, HTML

**Software:** Tableau, Git, Microsoft Word, Excel, Powerpoint, Jira, ETL

**Others:** Machine Learning, Deep Learning, Computer Vision (OpenCV), Signal Processing