

Summary

Mechanical engineering graduate student with strong experience in using Python with packages such as Tensorflow, Scikit-Learn, Pandas, and NumPy for machine learning and data applications.

Education

University of Rhode Island

Kingston, RI

Masters of Science in Mechanical Engineering
GPA: 3.93

German International Engineering Program – University of Rhode Island

Kingston, RI
Darmstadt, Germany

Technische Universität Darmstadt

Bachelor of Science in Mechanical Engineering
Bachelor of Arts in German
GPA: 3.91

Related Coursework: Deep Learning, Machine Learning, Advanced Statistics for Research and Industry

Experience

University of Rhode Island - Kingston, RI

September 2017 – Now

Research in Microfluidics

- Tasked to create a fluidic paper device capable of detecting phosphate levels in water
- Created an iOS app to quantify colorimetric measurements of various reactions
- Built an infrared imaging box with a Raspberry Pi to improve sensitivity of the Molybdenum Blue method

Porsche - Weissach, Germany

March – July 2017

Transmissions and Electric Powertrains Intern - R&D

- Worked on several projects in R&D in the areas of Transmissions, Electric Drives, and Internal Combustion Engines
- Gained insight into many innovative concepts in an R&D department environment of a major automotive company
- Worked extensively with MATLAB and Simulink

TU Darmstadt - Darmstadt, Germany

October 2016 – February 2017

Research at the Institute for Internal Combustion Engines and Powertrains

- Assigned a project to analyze the correlations between vehicle speed and the temperatures of several emission components
- Work involved utilizing AVL Concerto to analyze data from test drives

Projects

Colorimetry App

Swift, Firebase

Image processing app developed to output and manipulate RGB values from photos. Intended for quantifying chemical levels in colorimetric reactions. The app also interfaces with an online database center.

Project Shark

Python

A convolutional neural network architecture built to classify different species of sharks.

Decision Maker

Swift

Simple app for helping users make decisions. 15,000 downloads and a 4.5/5 average review on the app store.

Calculator <|>

Swift

Calculator with customizable themes. 12,000 downloads and a 4.6/5 average review on the app store.

Skills

- **Software:** Python, Swift, Matlab, MySQL, HTML, CSS, CATIA, Simulink, SolidWorks, Concerto, Visual Basic
- **Libraries & Frameworks:** Keras, Tensorflow, Pandas, Sci-kit Learn, Flask, Firebase
- **Languages:** Fluent in English, Portuguese. Advanced in German. Beginner in French.

Activities

2014 Vice President, URI Powerlifting Team

Member, National Society of Black Engineers