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## Education \_

### **Georgia Institute of Technology**

Atlanta, GA

**B.S. IN INDUSTRIAL AND SYSTEMS ENGINEERING** 

August 2014 - December 2017

• GPA: 3.55

Experience \_\_\_\_\_

SpaceX Hawthorne, CA

DATA SCIENTIST Jan 2018 - Present

- Developed machine learning algorithms to enhance enterprise technologies, including a computer vision based deep learning model to expedite video review in test operations.
- Designed a Python machine learning platform and toolkit consumed by developers across the company to build and deploy
  applications.
- Collaborated with cross-functional teams across disciplines such as product, engineering, and supply chain.
- Developed models to better predict work order completion dates to optimize forward scheduling of manufacturing operations.

SpaceX Hawthorne, CA

SOFTWARE ENGINEER, MACHINE LEARNING INTERN

May 2016 - August 2017

- Implemented a supervised learning classifier that predicts the proper disposition for machine shop non-conformance defects to
  accelerate the issue handling process and increase reliability of the rocket.
- Developed a language processing library to help data scientists perform common tasks such as data cleansing, text vectorization, and computing similarity of text documents.
- Developed several natural language processing algorithms using word2vec, TF-IDF, and topic modeling to identify and rank related text documents.
- · Created a data partitioning strategy to minimize network latency and improve scalability throughout the data warehouse.

#### **Dan Food Services Corporation**

Annapolis, MD

QUANTITATIVE ANALYST

June 2013 - May 2015

- Designed the labor vs. sales optimization program for restaurant operations by analyzing forecasted and historical sales data and airline traffic patterns in R.
- Developed a predictor model in Python (using NumPy and Pandas) and visualization in Tableau to determine an optimal amount of inventory stock needed to meet variability in customer demand.

# Projects \_

## Malaria Vector Control (in collaboration with the CDC)

August 2017 - December 2017

- Developed a simulation for malaria transmission based on human-mosquito interaction and existing malaria prevention efforts.
- Modeled the return on investment of implementing indoor residual spraying for malaria program managers to mitigate infection, monitor risk, and trace disease during an outbreak.

FairEstimate January 2017 - July 2017

- Led the development of a web application built around the Google Maps and Uber APIs to compare and visualize real-time cost and trip duration estimates for different rideshare services.
- Developed a neural network to train a model with 98% accuracy to predict taxi fares using the NYC Taxi dataset (>20 mil records).

# **Skills**

**Languages:** Python, R, SQL, Java, JavaScript, Swift, Scala, MATLAB

**Libraries:** d3.js, Keras, TensorFlow, NLTK, OpenCV, scikit-learn, Elasticsearch

**Technologies:** HTML5, CSS3, Hadoop, Spark, Pig, REST, Docker, JSON **Software:** Tableau, Microsoft Azure, AWS, Weka, OpenRefine, Arena