

# Daniel Kurniawan

☎ (+1) 443-956-6027 | ✉ danieljkurniawan@gmail.com | 🏠 dkurniawan3.github.io | 📷 dkurniawan3 | 📺 dkurniawan3

## 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

FLIGHT SOFTWARE ENGINEER

Jan 2018 - Present

- One of two product leaders on the Autotest team, responsible for the technology behind SpaceX's testing ecosystem for software and hardware across Flight Software, Avionics, and Vehicle Integration teams (~140 engineers).
- Led the Python 2 to 3 migration effort across various teams within the software organization.
- Designed and delivered an offsite, export compliant package of Autotest for contract manufacturers.
- Built a custom exceptions package in Python to increase transparency and ability for users to troubleshoot errors.
- Developed machine learning algorithms to enhance enterprise technologies, including a computer vision based deep learning model to expedite video review in test operations.
- Implemented a feature in Swift to detect blurriness in images for SpaceX's internal iOS application.

### 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, SQL, Java, JavaScript, Swift, Scala, Linux shell scripting, MATLAB

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

**Technologies:** HTML5, CSS3, Hadoop, Spark, Docker, Flask, JSON, Ansible, Postgres

**Software:** XCode, Tableau, Microsoft Azure, AWS, Weka, OpenRefine, Arena