

# BRIAN LUK

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## EDUCATION

**Cornell Tech, Cornell University**, New York, NY May 2021  
*Master of Engineering in Operations Research and Information Engineering* | GPA: 3.9  
Merit Scholarship Recipient

**Relevant Coursework:** Product Studio, Applied Machine Learning, Data Science in the Wild,  
Modeling Under Uncertainty, Optimization methods, Computer Vision

**Brandeis University**, Waltham, MA May 2016  
*Bachelor of Art in Computer Science, Political Science*

## SKILLS

**Technical:** Python (NumPy, Pandas, Matplotlib, Sklearn), SQL, Java, CSS, JS, HTML, Git, AWS, Google Big Query  
**Operating Systems:** UNIX, Windows

## EXPERIENCE

**Game Card Trading, Cofounder & CTO**, New York, NY Mar 2020 – Present

- Built a web scraper program that captures price arbitration opportunities in multiple e-commerce marketplaces such as Amazon
  - Extract data from over 5000 webpages and to perform data wrangling from different data sources into structured datasets
  - Analyze datasets to identify trading card targets for the day using different criteria (historical data, trading volume, popularity)
  - Parse datasets to seek the greatest price arbitration for each targeted card and identify the best marketplaces for execution to maximize profit
- Generate results of the program in a presentable spreadsheet for cofounder and traders to aid in trading decisions

**TradeIt (Acquired fintech startup), Lead Support Engineer**, New York, NY June 2016 - Dec 2018

- Managed all technical support and product onboarding inquiries
  - Investigated and triaged all technical issues related to the API product to ensure service reliability and to reduce outage by 50%
- Implemented server status alert system using Pingdom and sent notification to alert unusual activities in server. Identified potential server or database issues to arrange preemptive measures so as to prevent production outage by 30%
- Built internal dashboard to show support team performance metrics to identify bottlenecks in support turnover time
  - Automated email responses to inquiries using keywords in title and content to reduce manual support by 40%
  - Created script to group inquiries into different priorities based on inquirer's email address to remove prioritization effort by 50%

**Voyager (FinTech startup), Software Engineer**, New York, NY Mar 2019 - Mar 2020

- Built automated UI test framework for key product, eliminating 70% of manual regression test
- Integrated automated test into Jenkins continuous integration platform, streamlining test and build process
- Implemented integration tests in Node.js backend server, increasing test coverage by 30%

## PROJECTS

**ML for Stress Detection with Wearable-Generated Biometric data** Sept 2020 - Dec 2021

- Tested the feasibility of a product that can help monitor emotional states using commercially available technology
  - Feature-engineered and analyzed raw data using statistical methods and third-party libraries such as NeuroKit and HeartPy
  - Trained different ML models such as KNN, SVM, Random Forest to test and evaluate the accuracy of different features

## VOLUNTEER EXPERIENCE

**Cornell Tech Let's Code Event** Fall 2020

- Mentor students at PS/IS217 on product design and coding as part of a Hackathon

## CERTIFICATION

Data Analyst Nanodegree by Udacity, Machine Learning by Coursera, The Data Scientist's Toolbox by Coursera

## INTEREST

- An avid marathon runner
- Captaincy Brandeis University Varsity Swimming & Diving Team, Waltham, MA Sept 2013 - Mar 2015