

## EDUCATION

### University of Maryland, College Park Honors College

Computer Science and Mathematics, Dual Degree  
Data Science Concentration, Statistics Concentration  
Entrepreneurship/Innovation Honors Program  
Expected: May 2019 | GPA: 3.63

## LANGUAGES

Python | Java | Scala | Swift | Ruby | OCaml  
HTML | CSS | Javascript | jQuery | SQL | C | R  
**Work in:** Spark | Elasticsearch / Kibana |  
React.js | React Native | Node.JS | MongoDB |  
Amazon Web Services | Dojo Toolkit

## PROJECTS

### Music Composition with Deep Learning

<http://github.com/will108/Keras-Music-Generation>

- Trained a deep neural network with Keras and TensorFlow Backend on classical music MIDI files
- Built predictive model with a LSTM network to generate original classical music in the styles of different composers

### Dandy Live Data Science Dashboard

- Monitored user base of Dandy Live app (startup in Los Angeles area)
- Data visualizations with R Shiny
- Analyzed logs from Dandy Live App to gain insights on user base with SQL and R
- Data used to make business decisions and secure seed round of funding

### PhotoTagger

<http://github.com/will108/PhotoTagger>

- React Native iOS application to automatically share photos with friends who appear in them with facial recognition
- Implemented AWS Rekognition, DynamoDB, Lambda, and S3, as well as Facebook authentication

### National Hillel Basketball Tournament

- React Native iOS and Android application for the basketball tournament
- Provides live scores to attendees of all games, game update push notifications, tournament events, team profiles
- Built on AWS DynamoDB, S3, SNS, Lambda

## AWARDS AND ACHIEVEMENTS

- University of Maryland President's Scholarship
- TAMID Group Fellowship 2017
- Deans List
- TAMID Group National Case Competition Finalist 2016

## WORK EXPERIENCE

### MathWorks, Engineering Development Group Intern (Summer 2018)

Natick, MA

- Developed a new means of viewing and sharing MATLAB as a readable document with live controls, code, and outputs on the web with Javascript
- Wrote tests to ensure new viewer would be compatible with existing products
- Implemented new interactive viewer to work with MATLAB online servers and existing products
- Fixed internal testing platform by improving scalability and automating active test campaigns with Javascript, Java, HTML, CSS, Dojo Toolkit

### Neura, Data Science Intern (Summer 2017)

Tel Aviv, Israel

- Developed dashboards on Kibana to monitor rapidly scaling user base
- Discovered users experiencing data-gaps in raw data collected through analysis of user data with Spark (using Scala)
- Transitioned monitoring systems from MongoDB to Elasticsearch
- Analyzed user trends with SQL on Amazon Athena over raw data in S3

### Triple G, LLC (Acquired), App Developer (2015-2016)

College Park, MD

- Repaired iOS "Vayde" App, the #1 trending search on the iOS App store, #15 Puzzle Game in January 2016
- Debugged company's previous code which caused lagging in the game
- Completely redesigned the home screen, improved game fluidity, and integrated iOS GameCenter

### Harvard Medical School, Research Intern (Summer 2015)

Boston, MA

- Performed procedural tests with infected cancer and ALS cells
- Analyzed differentially expressed genes in R to determine the increased biological pathways in specific diseases
- Wrote a 40 page research report on DNA Microarray technology and the results of completed tests

## LEADERSHIP EXPERIENCE

### Zeta Beta Tau Fraternity, President (2016-2017)

- Led an executive board and over 25+ standing committees
- Designed and managed a housing budget of over \$250K to ensure stability and growth of funds
- Raised over \$18K to be donated to Children's Miracle Network Hospitals in a year
- Received the university's Outstanding Community Service Programming Award

### National Hillel Basketball Tournament Board, Tech (2017-2018)

- Built iOS and Android applications for participants of the tournament
- Worked with a board of 25 to run the tournament
- Built administrator account permissions to update games live from within the app

### TAMID Group, Project Manager (2016-2017)

- Led a team to consult for Papaya Global
- Performed market research on potential customers and users of Papaya Global's software service
- Presented findings to CEO on how they could reach more customers in the United States