

# Muhammed Ahmed

<https://mahmed13.github.io/>

Email : mahmed13@uga.edu

U.S. Citizen

## EDUCATION

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- **University of Georgia** Athens, GA  
*B.Sc. in Computer Science; Institution GPA: 3.7*  
*Certificate in Applied Data Science*  
*Expected Dec 2018*

## EXPERIENCE

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- **Quinn Research Group** Athens, GA  
*Machine Learning Researcher*  
*Nov 2017 – Present*
  - **Spot Nuclei. Speed Cures.:** Computer vision nuclei detection which allows for more efficient drug testing on diseases like cancer, heart disease, chronic obstructive pulmonary disease, Alzheimers, and diabetes.
  - **Poloniex Trader:** Time series forecasting using machine learning algorithms on cryptocurrency prices.

## OTHER EXPERIENCE

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- **UGAHacks 3** University of Georgia  
*Hackathon Participant*  
*Spring 2018*
  - **Google Assistant Challenge Winner:** Voice activated book recommender for the Google Home the using Google Cloud Services, Dialogflow, and GoodReads.com data.
  - **Aspirent - Uber Data Analytics Challenge Winner:** Anomaly detection using Uber ride data modeled as a Barabási-Albert mechanism. Optimized ride request times given an individual's source and destination. Constructed a random walks matrix that outputs the probability of a destination given the source location.
- **Advanced Technology Development Center** Georgia Institute of Technology  
*Jr. Entrepreneur*  
*Spring 2018*
  - **Startup Accelerator:** Worked alongside entrepreneurs and mentors at Georgia Tech's Advanced Technology Development Center. Gained insight into the business canvas model and customer archetype through customer discovery.

## PROJECTS

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- **NFL Predictions:** Retrieved and processed all player game logs, combine, and injury data for every player. Our XGBoost ensembling beat out some paid online predictors on unseen data.
- **Bitcoin Volatility:** Explained Bitcoin's price volatility using a combination of economic features. Our KNN Regression was able to interpolate the unseen data points with a 5-fold cross-validation score of 0.95.
- **Graphical GPA:** iOS Application programmed in Swift 2 and Objective-C that uses a UITableViewController to display user's computed semester and overall GPA. Implements iOS Charts framework to display this data in a scatter plot.
- **Simple B.O.B.:** iOS Application programmed in Swift 2 that tracks Kennesaw States Big Owl Bus and notifies arrival times nearest to students current location.

## LEADERSHIP EXPERIENCE

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- **University of Georgia Rugby Club** Athens, GA  
*Officer of the Club*  
*Spring 2017 – Fall 2018*
  - **Social Chair:** Event planning and overseeing all social gatherings instrumental to team bonding, motivation, and success. Raising capital for events from our sizable alumni association. Coordinating with opposing collegiate teams for post-match socials.

## PROGRAMMING SKILLS

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**Languages:** Java (6 years), Python (3 years), C++, C, SQL, R, UNIX, iOS/Swift, L<sup>A</sup>T<sub>E</sub>X

**Frameworks:** Scikit-Learn, Pandas, Numpy, Tensorflow, Jupyter Notebooks