

# Abhishek Mallemadugula

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## Summary

Computer scientist with an interest in machine learning, finance, and software engineering. Seeking to use product development experience and strong problem-solving skills in an internship for Summer 2020.

## Education

### Georgia Institute of Technology

Aug 2017 - May 2021

Pursuing a B.S. in Computer Science

- Specializing in Intelligence and Modeling.

## Experience

### IBM Aspera (Cloud and Cognitive)

Jun 2019 - Aug 2019

Backend Software Engineering Intern

Emeryville, California

- Created a Ruby on Rails application to expose a prometheus end point so the analytics team can effectively monitor the health of Spark queries.
- Designed and implemented a Cassandra data model for internal logging. Wrote Scala code to read and manipulate messages from Kafka topics to insert into the database.
- Explored containerization for and used Docker tools to deploy each of the above projects.

### Georgia Tech Human Computer Interaction Lab

Jun 2018 - Aug 2018

Technical Intern

Atlanta, Georgia

- Built a framework and appropriate documentation for network visualizations.
- Created a SQL database along with a Python API for ease of read/write access from various types of data files.
- Created a backend to process queries from the user using Python using the NetworkX package
- Built a web app using ReactJS and D3/Vis that communicates with the backend to deliver visualizations to the user.

## Projects

### Algorithmic Trading

Jul 2018 - Current

Self Employed

- I automate trading strategies on the Forex market.
- Use TradingView and Python through the Quantconnect platform to discern and backtest strategies.
- Use mathematical and financial packages including Ta-Lib, NumPy, Pandas, Matplotlib, etc.
- Use a REST-V20 API from Oanda and AWS Lambda to deploy the strategy.
- My finance background is primary derived from books and online courses.

### Face Check

Mar 2019

HackGSU Project

- Built a ready-to-deploy testing/attendance authentication system based on facial recognition for classrooms.
- The application was built in python using a package called face\_recognition.
- The model was trained on the Labeled Faces in the Wild dataset with an accuracy of 99.38%

### Youtube Caption Analysis

Feb 2019

HackIllinois project

- Attempted to determine the complexity of a YouTube video's topic by analyzing the captions of the video.
- Completed the project using Python using natural language processing libraries such as TextBlob and NLTK.
- Turned the analysis into a web app using Flask.

### Dragon Jump

Dec 2018

Game

- A Game Boy Advanced game made in C
- Played on an GBA emulator.

## Skills/Interests

**Programming Languages:** Python, Java, C, Matlab, LC3 Assembly, some Ruby on Rails and Scala

**Technologies:** Docker, AWS Lambda/EC2, SQL, Cassandra

**Relevant Coursework:** Data Structures and Algorithms | Machine Learning | Intro to AI | Analysis of Algorithms | Computer Vision | Systems and Networks | Probability and Statistics | Data Manipulation

**Organizations:** AI Club, Big Data Club, Sailing, Racquetball, India Club