Abhishek Mallemadugula

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Objective

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 2021.

Education

Georgia Institute of Technology | Atlanta, GA   *(In Progress) December 2020 – December 2021*
M.S. Computer Science, Machine Learning and Robotics

Georgia Institute of Technology | Atlanta, GA   *August 2017 – December 2020*
B.S. Computer Science, Machine Learning and Modeling

Experience

IBM Extreme Blue | Austin Texas   *May 2020 – August 2020*
Extreme Blue Software Engineering Intern
- Responsible for developing and integrating a feature for automating root cause analysis documents in IBM's Cloud Event Management product.
- Automation saves 8-10 hours spent collecting data on each document. This results in saving over 100,000 man-hours annually at IBM alone.
- Developed the front end of the React application as well as the state container using Redux. Integrated IBM Watson to provide predictive action items
- Presented weekly to IBM executives to justify the feature, adapt the feature into existing site reliability engineers' workflows, and pitch to other IBM teams if they can make use of our work.
- Set up sprint goals and led scrum meetings daily. Communicated with stakeholders and other teams to find opportunities to integrate our work into other IBM SaaS products.

IBM Aspera | Emeryville, California   *June 2019 – August 2019*
Backend Software Engineering Intern
- Created a Ruby on Rails application to expose a Prometheus end point so the analytics team can effectively monitor the health of Spark queries using Grafana.
- 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 and used Docker tools to deploy both projects.

Georgia Tech | Atlanta, Georgia   *June 2018 – August 2018*
Technical Research Intern
- 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 2019 - Oct 2019*
- Automate trading strategies on the Forex market.
- Used TradingView and Python through the Quantconnect platform to discern and back test strategies.
- Used mathematical and financial packages including Ta-Lib, NumPy, Pandas, Matplotlib, etc.
- Used the Oanda api to communicate with the broker and AWS Lambda to deploy the strategy 24/7.

YouTube Caption Analysis | HackIllinois   *Feb 2019*
- 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 2019*
- A Game Boy Advanced game made in C
- Played on an GBA emulator.

Skills/Interests

Programming Languages: Python, Java, JavaScript, C. Some Matlab, LC3 Assembly, Ruby on Rails and Scala
Technologies: React, Docker, AWS Lambda/EC2, SQL, CouchDB, Cassandra
Organizations: AI Club, Big Data Club, Sailing, Racquetball, India Club