TOUSIF CHOWDHURY

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EDUCATION

Rochester Institute of Technology

BS Computer Science 2018
Current GPA: 3.33

SUMMARY

Software engineer and data enthusiast seeking fulltime opportunity. Explore my data mining projects on my GitHub profile, linked on this resume.

Coursework: Big Data Analytics, Data Cleaning & Prep, Intelligent Systems, Data Mining, Data Management, Parallel & Distributed Systems, Algorithms, Statistics, Linear Algebra, Intro to ML (Coursera)

SKILLS

PROGRAMMING SKILLS: Python, Spark, Pandas, NumPy, Scikit-Learn, Hadoop, Java, Javascript, Hive, SQL, NoSQL
DEVELOPER TOOLS: Jupyter, Superset, Airflow, Git, Jira, Confluence, Apiary, Swagger, Symfony, Loopback

EMPLOYMENT

TESLA — Palo Alto, CA

Software Engineering Intern (Data) — Sep 2017 to Dec 2017

- Used Spark, Python, Hadoop, Pandas, Hive, Superset and Airflow to process big data, develop analysis, calculate metrics and create dynamic dashboards for internal Tesla engineering, design and testing teams.
- Analyzed gear signal data recorded by Model S to calculate drive metrics like miles driven, minutes driven and speed. Analysis and data used by Reliability team to estimate Tesla Semi Truck repairs.
- Developed analysis using Model 3 lock/unlock signals to see how often owners use NFC card, Bluetooth, or Mobile App to unlock their cars. Engineered dashboard that will be used by design teams to decide support for NFC key card.
- Built methods using Google Maps API to calculate distance, elevation, speed, and elevation grade of paths that the semi truck will take. Estimates will be used by engineering teams to calculate stresses on parts of the truck and run simulations.
- Contributed to internal Python package to convert given source vehicle badge to target vehicle badge and the source vehicle's RPM and torque to convert to target vehicle's RPM and torque.

MCKINSEY AND COMPANY — New York, NY

Software Engineering Intern — May 2017 to Aug 2017

- Developed Restful API endpoints using Node.js and Express.js and created front-end components using React and Redux.
- Unit tested routes, controllers and middle-wares using Mocha and front-end components using Enzyme, Chai, and Sinon.
- Used Sequelize ORM to manage data models in backend. Wrote MySQL queries to update database schemas, insert new data and perform migrations. Worked in Agile environment using Jira for ticket management.

RIT — Rochester, NY

Full Stack Software Engineer — Feb 2017 to May 2017

- Developed application using Node.js, Loopback, Javascript and MongoDB to accurately sample deaf community.
- Implemented automated invitation capability to track users who completed survey and email them to invite more users.
- Deployed application onto a Red Hat Enterprise Linux environment and set up NGINX for a Reverse Proxy Server.

JOHNSON AND JOHNSON — Raritan, NJ

Software Engineering Co-op — Jan 2016 to Aug 2016

- Developed API using Symfony 3 and PHP for a medical application to make patient and doctor interactions easier.
- Created a library that parsed and converted health database API into usable PHP objects for the application layer.
- Unit tested every feature including routes, controller, services, repositories to increase code coverage from 5% to 40%.
- Used Jira, Stash, Confluence, Apiary, and Git and participated in daily stand ups within an agile environment.

PROJECTS

MOVIE PREDICTOR (PYTHON, PANDAS, NUMPY, SCIKIT-LEARN, MATPLOTLIB) — Apr 2017

- Engineered a system to predict a movie's rating based on attributes from metadata found online.
- Applied Scikit-Learn to develop predictive models using ML algorithms like Logistic Regression, SVMs and Decision Trees to classify the data. Uses cross section validation for training and testing data to test the accuracy of the models.

INSTAANALYTICS (PYTHON, FLASK, SCIKIT-LEARN, PANDAS, NUMPY) — Oct 2016

- Developed a web application that predicts how many likes your next Instagram post will get for a hackathon.
- Focused on Python and Sckit-Learn. Created predictive models using machine learning algorithms like linear regression.
- Develop back-end to use Instagram API and Clarifai API to gain metadata, pictures and tags to use for predictive models.