ACHINTYA PILLAI

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EXPERIENCE

Tesla Giga Factory 1 (Panasonic) – Software Engineer   May 2020- Present | *CA*

- Wrote multiple production REST API end points in JavaScript for a large-scale distributed backend system (which is called over 100,00 times per day) to allow users to create, read, access and delete data about the Tesla Model 3, Tesla Battery Pack & Panasonic Battery Cells for manufacturing.
- Implemented and wrote API's to get server health data and the send data to System Engineers to conduct regular server health checks. This helped reduce server downtime by half within 3 months and helped the company save $300,000 in costs.
- Wrote react native code to make the home page for the company iOS App, increasing the number of users of the App by 6% in 1 month.
- Reduced manual data entry for Quality Assurance Team by 80% by building Test data pipeline to collect data from Oracle databases and Microsoft SQL Databases and do calculations automatically on a day to day basis for reporting.
- Implemented and deployed multiple ETL Scripts in Python, R , Microsoft SQL and Oracle using tools such as SQL Agent & SQL developer.
- Apollo GraphQL used for making API to pull Information to help increase production in Battery for Tesla Model 3.
- I also conduct regular code reviews for API endpoints to make sure the API is not breaking data contracts already in place.

Tesla Giga Factory 2 (Panasonic) – Software Engineer   December 2018 – May 2020 | *NY*

- Used Python & R to deal with large size unstructured data in MySQL database and MongoDB, to manipulated and reshaped dimensions for EDA and other analysis using Machine learning and probability techniques.
- Used Python to analyze the development process and found high cost procedures & bottle necks in production to improve costs by 25%. (Seaborn, ggplot, matplotlib, scipy.stats)
- Successfully create pipeline to send and pull company production data from Hadoop.
- Made Multiple Machine learning models using Random forest, XGBoost, K-NN and logistic regression to predict the Product Quality, using Python. (Packages & Models: Scikit, Pandas, Numpy, Matplotlib, XGBoost, Random Forest, PCA)
- Made a Time-Series Forecast to predict how many employees will leave the company due to voluntary and involuntary terminations for the HR Team. Using Python. (Packages & Models: Scikit, Pandas, Numpy, Matplotlib, ARIMA)
- Used MongoDB, HTML, CSS, Node.js and Express to create a company new letter page, which dealt with access management for company specific employees, pulled and uploaded information to NoSQL Database (MongoDB) and used MySQL to pull user data.

Java Teaching Assistant – University at Buffalo   August 2016 – May 2018 | *NY*

- Wrote Java code for automated test cases when students submitted assignments, to reduce manual grading work by 90%.
- Created labs and demos in Java to help teach a class of 40 students object-oriented programming.
- Wrote code in Java of all major data structures to help 40 students learn about how to code efficiently.

EDUCATION

University At Buffalo – Class of 2019
- M.S. Engineering (Data Science) 3.5/4.0 GPA

University At Buffalo – Class of 2018
- B.S. Computer Science - 3.2/4.0 GPA

SOFTWARE SKILLS

- **Proficient in**: Python, Java, JavaScript, R, Node.js, HTML5, CSS, C#, MongoDB, SQL
- **Worked in**: Swift, SQL, React.js, Amazon Web Services, C++, Java, Asp.net, GIT, RESTful web services, GraphQL API, Graphics, iOS Dev, Data Science ,

PROJECTS/HACKATHONS

Full Stack Web Application
- Built a web application & wrote code in JavaScript and worked on the MERN stack. I also wrote template code in HTML and CSS with the Express framework. This Web App displayed daily company activities and regular announcements for different teams and stored activity information in MongoDB.

Other Side Projects
- Uber Data Analysis Web App using R and rshiny || Built a relational database for a Credit Scoring service using postgresql.