Amulya Boyapati

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EDUCATION

Master of Science Computer Science, the University of Illinois at Chicago   **CGPA**: 4/4   Aug 2021 – Dec 2022
Coursework: Advance Software Engineering, Secure Web Applications, Data Science with ML, Cloud Computing

Bachelor of Engineering Computer Science, Vellore Institute of Technology   **CGPA**: 3.98/4   June 2017 – July 2021
Coursework: Computer Algorithms, Data Structures, DBMS, Web Development, Software Engineering, Distributed Systems

SKILLS

Programming: Java, Python, JavaScript, C, PHP, Scala
Web Technologies: ReactJS, AngularJS, ExpressJS, NodeJS, HTML5, CSS, Bootstrap, Rest API
Databases & Cloud: MySQL, Mongo DB, GCP (GCS, Compute Engine, Dataflow, Pub/Sub, GCS, Big Query, Data Studio)
Tools & Frameworks: GIT, Apache Airflow, Adobe XD, Figma, IntelliJ, Docker, Apache Spark

EXPERIENCE

***Graduate Student Assistant,* UIC**   Aug 2021 - Present
- Working at the Research Technologies wing of UIC providing technical support to 1000+ UIC researchers with high-performance computing resources and developing tools for internal use.
- Resolved **200+** issues with parallel processing, job scheduling, and software issues in Linux system servers on HPC clusters.
- Built web application for the department that helps users to choose among various storage and computing services offered using React, Html/CSS, Node.js, and MySQL database.

Nielsen IQ
Software Engineer Intern [Azure Databricks, Spark, Scala, Airflow, Python, AngularJS]   Jan 2021 - Jul 2021
- **Automated Business Drivers**- an application that helps the packaged consumer manufacturers to determine the components that affect the sales, such as pricing, distribution, promotion, and advertising, and compare their performance with the competitors.
- Created a data-based framework to read **50 TB** of data from multiple sales acquisition channels and analyzed sales activity for 5 years in US and Europe regions.
- Minimized the use of static fields and custom config files in a component making the application more **dynamic**.
- Actively worked on the orchestration of the pipeline where the application trigger points were reduced from two to a zero-touch application, which reduced the cost of operation by **30 %.**
- Created a dynamic visualization platform for the clients using the Angular framework.

Cyient Ltd
Software Developer Intern [Python, Numpy, Pandas, Machine learning]   April 2019 - July 2019
- **Road Health Analytics**- Smart City initiative focusing on road infrastructure development using ML and AI
- Built a Mask R-CNN architecture to identify the road conditions by object detection and segmentation on satellite imagery feed.
- Used a data set of **300k** images over time to analyze the road pictures across different geographic locations in Hyderabad city.

PROJECTS

UIC Flames Data Analysis using GCP *[Python, Google Cloud Platform, Apache Airflow, Docker]*
- Designed and developed a pipeline for the university to visualize the data of the basketball players and display the best fastest players, highest paid, top tallest, top strongest players for the year to identify the data patterns.
- Deployed a docker container that streams real-time API data onto a Pub/Sub topic.
- Created a workflow using cloud composer (DAG) to migrate the data from the data lake to the data warehouse in scheduled time intervals. Designed an ETL system to process and clean the data in the data warehouse and visualized it using Data Studio.

Employee-Research Management System *[MERN Stack]*
- Developed a research management web app for the faculty in the university which 4 colleges adopted across 2 countries.
- The application is made with ReactJS on the front end, Express JS, and NodeJS on the backend, and is integrated with the Mongo database. Incorporated capabilities for the faculties to log in, add, view, update and delete their research work.

Air BnB Price Prediction *[Python, Jupyter, Numpy, Pandas, Matplotlib]*
- Partnered with Airbnb academically and built a boosting-based model to predict pricing for different homes listed on Airbnb.
- Used a dataset of 1M and provided recommendations and insights on the seasonal patterns, popular homes, and influential factors in the rental price.

ACHIEVEMENTS

- **Published "** Decentralized Social Network and Cryptocurrency Built Using Blockchain Technology**"** in *Journal of Advanced Research in Dynamical and Control Systems, Volume 12-04 special issue May'20.*
- **Leadership** – President of CodeChef-VIT Chapter, mentored a team of 200 members for organizing technical events, coding competitions, and hackathons. Received an ***"Award for Excellence"*** by the chancellor of VIT for overall performance.