Kalyan Venkat Madireddy

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Education

University of North Carolina at Charlotte, MS in Computer Science, GPA: 4.0 + **Dec 2023**
(*Summa Cum Laude Honor) | **Relevant Coursework:** Algorithms and Data Structures, Software System Design and Implementation, Data Base Management Systems, Machine Learning

SASTRA University, B.Tech in Computer Science and Engineering, GPA: 8.74 **May 2022**
(*Dean's Merit List top 15%) | **Relevant Coursework:** Object Oriented Programming (OOPS), Data Mining, Software Engineering, Web Development, Operating Systems, Cloud Computing, Networks

Skills

Languages: Python , Java , C++ , C , SQL, JavaScript, R
Technologies, Concepts & Tools: AWS Glue, PostgreSQL, Apache Airflow, JSON, REST API, HTML, CSS, React, Tomcat, Bootstrap, CI/CD, UX, SDLC, Multi-threading, Graphs, RDBMS, Normalization,Algorithm Design, Agile, SCRUM
Libraries and others: Pandas, NumPy, Matplotlib, Seaborn, Scikit-Learn, Data Modeling, Data Management

Experience

COMCAST | Xfinity **Chennai,India**
Software Development Engineering Intern | Full time | Best Performance award *Nov 2021 – Aug 2022*

- Engineered a real-time ETL data pipeline, enhancing response time by 30% for S3 bucket updates. Implemented these innovations using Python and AWS Glue, seamlessly integrating them into a PostgreSQL backend. Achieved this by adapting DevOps methods within an Agile setting.
- Streamlined S3 task automation design with Apache Airflow in a fast-paced environment, resulting in a 40% reduction in manual intervention. Implemented Python-powered DAGs that operate on JSON objects and update statuses at 30-second intervals through continuous deployment, thereby improving overall efficiency.

VERZEO **Bangalore, India**
Software Intern | ***Full time*** *May 2021 – Aug 2021*

- Steered the development of real-time dress recommendation system software that supports scalability and security, utilizing trending data migrated from the Twitter Application Programming Interface (API). These innovative solutions resulted in a 25% increase in market sales for the enterprise.
- Accomplished this by delivering recommendations based on appearance and mood while adopting Agile methodologies. Implemented sentiment analysis techniques across a diverse array of approximately 16 Machine Learning and Deep Learning algorithms, fostering effective collaboration and communication within the team.
- Amplified efficiency by 30% through strategically deploying a web application, aligning it with stakeholder use cases gathered during requirements gathering, and optimizing front-end tool utilization.

UNC Charlotte **North Carolina, USA**
Student Academic Tutor | ***Part time*** | Algorithms, Python, Machine Learning *Jan2023 – Present*

- Demonstrated personalized support to more than 40 students, fostering their confidence and facilitating their learning.
- Fostered a collaborative learning environment, boosting participants' ability to think logically within 6 months.

Academic Projects

Travel Management System (link) | Guide: Prof. Ali Sever **May 2023**

- Drafted and developed a Travel Management System, including a REST API, database queries, and a 30% speed boost through multithreading, promoting teamwork for success. Tech: Java, REST APIs, HTML, CSS, Multi threading, SQL, Tomcat, React, Java Script, Bootstrap, Agile, CI/CD, UX, Software development life cycle (SDLC), Team work.

Loss Ratio Prediction For Insurance Portfolios (link) | Guide: Prof. Gabriel Terejanu | Kaggle link | **May 2023**

- Propelled a pioneering loss ratio project, resulting in a 15% enhancement in pricing. Applied data analytics for informed decision-making, engineered insights, and contributed to decision-making through advanced predictions. Tech: Python, Pandas, NumPy, Matplotlib, Seaborn, Scikit-Learn, Tableau, Power BI, Git, Hadoop, Time Series Forecasting, AWS.

Network Optimization Project (link) | Guide: Prof. Srinivas Akella **Mar 2023**

- Fabricated an algorithms project, achieving a 20% improvement in network optimization and effectively addressing complex network challenges using shortest path techniques. Tech: Graphs, Algorithm Design

Data Base Management Project (link) | Guide: Prof. Sara Riazi **Mar 2023**

- Architected a robust hospital database project using SQL, enabling efficient data management and retrieval with over 10,000 patient records and 50,000 medical procedures. Tech: Data Modeling, RDBMS, Normalization, PostgreSQL

Multi User Secure Chat Rooms (link) | Guide: Prof. Sasikala Devi **Jan 2022**

- Created a robust chat room application with advanced security measures, resulting in a 25% improvement. Tech: Java, JavaScript, HTML, React, WebSocket, REST API, SQL, HTTP, Kubernetes, Apache, Git, SSL, Jenkins, Agile, UX, Jira.