Harsha Vardhan Goud Maragoni

Binghamton, NY | 607 352 8204 | hmarago1@binghamton.edu | Linkedin

EDUCATION

Binghamton University, SUNY, Thomas J. Watson College of Engineering and Applied Sciences *Dec 2023*
Master of Science in Computer Science **GPA:** 3.70/4.00

TECHNICAL SKILLS

- Java | Python | C Language | JavaScript | HTML | CSS | jQuery | Ajax | React.js | SQL | Oracle DB | MongoDB | Excel |
- Flask | AWS | Pandas | NumPy | Matplotlib | Git | Power BI | Linux/Unix | Microsoft Office Suite | Google Workspace |
- Unit Testing | API's | REST | SOAP | Agile | Design Patterns | Algorithms | Data Structures | Programming languages |
- Computer Architecture and Organization | Computer Networks | Operating Systems | Bootstrap | MySQL |

Certification: JPMC Software Engineering Virtual Experience, ServiceNow Developer, Data Science, Machine learning.

PROFESSIONAL EXPERIENCE

SUNY at Binghamton, Teaching Assistant, Computer Networks, Binghamton, NY *Aug 2022 - Jan 2023*

- Assisted in the instruction and mentoring of students enrolled in Computer Networks course, offering guidance and support in implementing course projects.
- Conducted regular office hours, providing individualized assistance to students to help them troubleshoot technical issues and resolve challenges in their project work.
- Facilitated weekly team meetings, where I led discussions to clarify concepts, address questions, and foster collaboration among students working on course projects.

Wipro Technologies, Software Engineer, Hyderabad. *Nov 2019 - Jan 2022*

- Delivered operational support, production assistance, testing, and documented Standard Operating Procedures (SOPs) for complex systems.
- Developed and reported metrics associated with system performance and project execution to stakeholders.
- Provided exceptional customer support, resolving 98% of user-reported issues within 24 hours.
- Achieved a 15% improvement in database query performance through query tuning and indexing strategies.
- Utilized incident management tools like ServiceNow to address customer issues by writing SQL queries and resolving incidents reported by them.
- Maintained comprehensive technical documentation, resulting in a 30% reduction in onboarding time for new team members.
- Communicated with technical and non-technical stakeholders, worked in fast-paced, dynamic environment, and adapted to changing priorities and requirements.

PROJECT EXPERIENCE

- ***Social Media Data Science Pipeline Analyzing Twitter, Reddit and 4chan trends on Covid-19:*** Leveraged APIs for real-time data collection and engineered a comprehensive analysis system for Twitter, Reddit, and 4chan using Python. Integrated sentiment analysis with Matplotlib and Seaborn and designed an intuitive data visualization dashboard with Python and Flask for data-driven insights.
- ***Web Server proxy*:** Implemented a Python-based web proxy server with caching to improve performance by caching web pages and validating cached responses. The server is multi-threaded and forwards requests and responses between clients and web servers.
- ***Computer Architecture and Organization*:** Designed and implemented two crucial simulators Firstly, a cycle-by-cycle simulator tailored for an in-order APEX pipeline with 5 stages and data forwarding mechanism. Secondly, an out-of-order preprocessor simulator for an APEX-like ISA, featuring an issue queue, load-store queue, reorder buffer, and efficient register renaming, all meticulously crafted using the C language.
- ***Database Management System*:** Implemented a Student Registration System with PL/SQL and JDBC to support common registration tasks. Collaborated with a team of three to develop a PL/SQL package and JDBC for a Student Registration System. Implemented various functions to manage student registrations, such as displaying tables, registering and dropping students, and logging user operations.
- ***Design and Analysis of Algorithms*:** Developed a cost optimization solution for a job assignment problem using Hungarian, branch and bound algorithms with Python programming language.
- **Operating Systems:** Implemented a custom operating system based on xv6 with advanced features including scheduling, paging, concurrency, and copy-on-write (COW) functionality using established operating system design principles, achieving 100% test results.
- ***Movie recommendation System*:** Developed a movie recommendation system using Python libraries Pandas, NumPy, and Scikit-learn. Calculated cosine similarity between movies based on user and movie ratings.
- ***Employee Travel Management System:*** Developed a business travel tracking and analysis application using the ServiceNow Developer tool, featuring user-friendly booking options, trip transportation and tracking, and bill management.
- ***Warrant Claims Analysis:*** Implemented a warranty claims analysis project with 358 entries and 21 attributes, emphasizing claim accuracy. Conducted data preprocessing, extensive exploratory data analysis, and applied machine learning models, including Decision Tree Classifier, Random Forest Classifier, and Logistic Regression, resulting in a notable 92% accuracy rate in detecting deceptive warranty claims.