

Varshini Golla

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EDUCATION

State University Of New York At Buffalo, Buffalo, NY

Aug 2023 – Dec 2024

Master of Science in Computer And Information Science

Coursework: DataBase Management Systems(Capstone), Analysis Of Algorithms, Operating Systems,Data Intensive Computing.

Sathyabama University, Chennai, India

Jun 2019 - May 2023

Bachelor of Science in Computer Science and Engineering

Coursework: Web Development, Data Structures, Object Oriented Analysis, Cloud Computing, Code-Optimization And Debugging.

SKILLS

Programming Languages: Java, Python, PHP, SpringBoot

Web Development: HTML, CSS, JavaScript, Bootstrap, Node.js, Angular JS

Database & Cloud: MySQL, MongoDB, SQL Server, NoSQL, AWS

Hardware & Software: Git, Selenium, PowerBI, Pycharm, Visual Studio, IntelliJ, Linux, GDB

PROFESSIONAL EXPERIENCE

GoAudits Private Limited | Bangalore, India

Software Developer Intern

Apr 2022 - Mar 2023

- Worked on building an e-commerce platform to allow inventory updates and purchasing abilities for users, in which we used technologies like **ReactJS**, **MVC frameworks**, **Selenium**.
- Developed and maintained web applications using **Java**, **Javascript** and React, resulting in a 20% increase in website traffic and improved user experience.
- Collaborated closely with a cross-functional team of designers, front-end developers, and QA engineers to conceptualize and implement the platform's user interface using React JS. This resulted in an intuitive and visually appealing user experience.
- Implemented the **Model-View-Controller (MVC) architectural pattern**, ensuring modular and maintainable code. This approach streamlined development and reduced the time required for feature additions and updates.
- Designed and executed end-to-end testing strategies using **Selenium** automating the testing process and reducing manual testing efforts by 30%. This led to higher product quality and faster release cycles.
- Extensive Hands-on in Git.

HCL Technologies | Chennai, India

Machine Learning Intern

Jan 2022 - May 2022

- Improved prediction accuracy by 35% through the development of advanced machine learning utilizing **Random Forest analysis**, after analyzing more than 100,000 records using **Numpy and Pandas**.
- Reduced false positive rates by 20% by implementing sophisticated **data preprocessing and augmentation methods**.
- Enhanced user experience by 40% by deploying the model as an interactive application with a dynamic front end built with **HTML and CSS**, launched in **Heroku**, and created dashboards and reports using **PowerBI**.
- Delivered the project in an **Agile environment**, collaborating with cross-functional teams through iterative sprints, ensuring continuous feedback and improvement.

ACADEMIC EXPERIENCE / PROJECTS

Relational Database Engine (Taco-DB) | C++, gdb,linux

- Developed core features including **join algorithms**, **aggregations**, **caching**, and **B-tree indexing**. Implemented storage management, query processing, and optimization in a large-scale **RDBMS**.
- Ensured system correctness by testing against **200+ test cases** using **Google Test**. Contributed to building a high-performance, reliable database engine.

Smart CCTV Surveillance System

- Developed a Smart CCTV from scratch using python and advance image processing techniques, including **OpenCV** and **Numpy** to enhance security through real time object detection and face recognition
- Engineered a **wireless-enabled IP camera system** for **theft detection**, **zone monitoring**, and **intrusion recording**, utilizing **LBPH** for **face recognition**, **Gaussian Mixture Models (GMM)** for adaptive background subtraction, and **Structural Similarity Index (SSIM)** for image comparison, with a **Stream lit** interface for user interaction in Python.

Blogging Platform with User Authentication

- Developed a blogging platform with **user authentication** using **JWT**, allowing users to **create**, **edit**, and **delete** posts. Integrated features like **tagging**, **categories**, **comments**, and **liking posts** for enhanced interaction.
- Built with a **ReactJS** frontend, **Node.js** backend, and **MongoDB** database.

PUBLICATIONS & CERTIFICATIONS

- Smart CCTV Surveillance System: [fin irimets1679739909.pdf](https://www.researchgate.net/publication/3679739909) **International Research Journal (2023)**
- Google - Python Crash Course Certification.