VAISHNAVI NIKAM

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EDUCATION

Syracuse University <div align="right">Syracuse, NY, USA</div>
Master of Science in Computer Science | GPA: 3.33/4 <div align="right">*August 2024 - May 2026*</div>
Coursework: Design and Analysis of Algorithms, Computer Architecture, Assured Programming with Formal Methods, Applied Natural Language Processing, Advanced Principles of Operating System, Database Management System.

University of Mumbai <div align="right">Mumbai, India</div>
Bachelor of Engineering in Computer Engineering | GPA: 8.63/10 <div align="right">*August 2020 - May 2024*</div>
Coursework: Data Structures, Object-Oriented Programming, Operating Systems, Computer Network, Database Management, Data Warehousing and Mining, Machine learning, Mobile Computing, Software Engineering, Cloud computing.

TECHNICAL SKILLS

- **Languages:** C++, Java, Swift, Python (Scikit-learn, Matplotlib, Pandas, Seaborn)
- **Frontend Technologies:** HTML, CSS, TailwindCSS, JavaScript, ReactJS, Typescript
- **Backend Technologies:** Spring Boot, Node.js, Express.js, Golang
- **Databases:** MySQL, PostgreSQL, MongoDB
- **Tools:** Git, Visual Studio, MySQL Workbench, Jupyter, Postman, Eclipse
- **Other:** Github, AWS, Docker, WordPress

WORK EXPERIENCE

Fusion Jewelry Manufacturing Company Private Ltd. <div align="right">Mumbai, India</div>
Software Engineer Intern <div align="right">*January 2024 - June 2024*</div>
- Collaborated with a team of 10 engineers to optimize GATI software, a key outsourced solution for tracking manufacturing goals, production processes, and workers, leading to improved operational efficiency.
- Analyzed business requirements and identified key inefficiencies, ensuring the software was aligned with organizational goals to streamline operations and improve productivity.
- Played a key role in identifying and addressing system gaps, enabling more accurate tracking and reporting, resulting in a 10% improvement in worker capability optimization and enhanced business performance.

PROJECTS

Sight - iOS App for Visual Impairment Assistance <div align="right">*January 2025 - Present*</div>
Swift, XCode, Go, Google Vision API, Facebook API, NGrok
- Built a native iOS app in Swift to assist visually impaired users in recognizing faces, identifying objects, and reading text aloud.
- Integrated Google Vision API for real-time OCR, sentiment analysis, and object detection.
- Utilized Facebook's tagging algorithm to identify and announce user's friends through face recognition.
- Developed a Go-based backend, optimizing image processing and integrating with Facebook's private API for seamless user experience.
- Currently working on incorporating personality description and fall detection algorithms for enhanced safety features.

Framework for Groundwater Quality Prediction <div align="right">*December 2023 - May 2024*</div>
Python, Scikit-learn, Matplotlib, Pandas, Seaborn
- Led a team of four members to develop a predictive model for assessing groundwater quality using machine learning.
- Computed Water Quality Index (WQI) to classify water into five categories: *very bad, bad, medium, good, and excellent*.
- Analyzed 14 key parameters (pH, EC, Total Hardness, Sodium, Calcium, etc.) to train various classification models.
- Achieved 96.61% accuracy using XGBoost, with a 90.58% cross-validation score, optimizing feature selection through Correlation Analysis.

PUBLICATIONS

- Presented the research paper **"Predictive Model for Assessment of Consumable Water: Comprehensive Review"** at the *"8th International Conference on Engineering Research and Innovations"* (Navi Mumbai, September 2023), highlighting a machine learning-based model for assessing water quality, fostering discussions on innovative techniques in water management.