ROHINI DESHMUKH

r.deshmukh001@umb.edu | +1(857)308-7396 | Boston, MA | LinkedIn | GitHub

EDUCATION

Master of Science in Information Technology | University of Massachusetts, Boston, MA | GPA 3.6/4 **Expected May 2024**
[Courses: Database Management, Computer Graphics, Data Mining, Project Management, Cloud Computing, Organizational Analysis]
Bachelor of Engineering in Information Technology | University of Mumbai, Mumbai, India | GPA 7.67/10 **May 2018 - Jun 2021**
[Courses: Machine Learning, Artificial Intelligence, Analysis of Algorithm, Data Structures and Algorithms, Operating System]

SKILLS

Frontend Technologies: Expert in **ReactJS and NextJS** for dynamic UIs with proficiency **in HTML, CSS, JavaScript (ES6), Typescript, Bootstrap**, **Streamlit** and frameworks such **as Angular, Vue JS, xtk.js, Three.js, WebGL, and WebGPU**, delivering engaging and responsive designs.
Backend Development: Expert in server-side logic with **Node.JS**; diverse programming background **in C,Java, Python, Django, Flask, Express;** proficient in **REST APIs, JSON, XML** for seamless data exchange. Familiarity with cloud-based infrastructure such as AWS for deploying scalable applications.
Databases and Methodologies: Proficient with **Git, GitHub, IntelliJ, VS Code, JIRA, Confluence**; experienced in **Agile, Scrum** methodologies; skilled in database management and deployment on **MySQL, PostgreSQL, MongoDB** for robust, scalable applications.
Soft Skills: Strong in **problem-solving**, **teamwork**, and **leadership**; **effective communication, adaptability, detail orientation**, and **time management** to meet project goals and deadlines.

WORK EXPERIENCE

Teaching Assistant | University of Massachusetts | Boston, Massachusetts **Sept 2023 - Present**

- Led multiple student teams in project **planning** and **execution**, utilizing **Gantt charts** for detailed scheduling, **monitoring** progress, and ensuring on-time **project delivery**.
- Cultivated a **collaborative** team environment by ensuring equitable work distribution, facilitating effective communication, and resolving conflicts, leading to increased team productivity and cohesion.
- Implemented regular progress reviews and adjustments to project plans, ensuring all team members actively contributed and maintained high-quality standards, while also providing targeted support to address any performance gaps.

API Integration Intern | Calix | San Jose, California **May 2023 - Aug 2023**

- Developed a comprehensive API documentation tailored for Broadband Internet Service Providers (BISVs), utilizing **Confluence** as a platform to enhance accessibility and knowledge sharing among partners companies.
- Engaged in API endpoint testing and validation using **Postman** to ensure robust integration and reliable performance benchmarks thereby contributing to the iterative development process and user acceptance testing (UAT) protocols.
- Assisted in design and standardization of API communication protocols focusing on **RESTful** principles to streamline data exchange processes between Calix systems and BISV partner applications, significantly improving integration efficiency and consistency.

Software Developer | Germinait | Mumbai, Maharashtra **May 2021- July 2022**

- Led the development of client websites using **React** for Front-end architecture implementing sophisticated user interfaces and ensuring optimal performance and user engagement.
- Leveraged Nodejs for the creation of efficient, scalable back-end services, facilitating seamless data handling and integration with external APIs, significantly enhancing site functionality and responsiveness.
- Employed modern **React** features, including **Hooks** and **Context API**, to manage state and context across the application, resulting in more maintainable and modular codebase.

ACADEMIC PROJECTS

BOOSTLET.js | Web-based Image Processing Library | JavaScript **Ongoing**

- Developed “Boostlet.js”, web- based image processing plugin that significantly extends the existing medical imaging libraries , this processing works with various image visualization frameworks
- Integrated the framework with advances image processing libraries like cornerstone.js, Niivue.js and Openseadragon.js

- Implemented sophisticated image processing techniques, including applying the Sobel filter for edge detection and utilizing Meta's Segment Anything model (SAM) for enhanced image segmentation.
- Executed data processing algorithms such as displaying a plotly histogram for analysis image captioning using hugging face API.

Project Cardiowave | Web Based Application | JavaScript **Sept 2023 - Dec 2023**

- Developed a solo project for a Computer Science course "Project Cardiowave", a web-based ECG analysis tool using Three.js and WebGL, for real-time 3D heart visualization and ECG data correlation.
- Introduced an intuitive drag and drop interface for easy ECG data upload and analysis, streamlining the diagnostic process for clinicians.
- Created a custom ECG parser to convert raw data into visual graphs and 3d heart animations, improving diagnostic accuracy.
- Utilized HTML5, CSS3, and JavaScript ES6 for a responsive, cross platform application, enhancing user experience on various devices.

Yahoo Finance Scrapping| Web Scrapping and Analysis | Python **Jan 2023 - May 2023**

- Advanced Python scripting for extracting Yahoo Finance data, leveraging Beautiful Soup and requests for complex data structures.
- Analyzed financial data trends using pandas and NumPy; created impactful visualization with Matplotlib and Seaborn
- Forecasted stock prices via regression analysis with Scikit-learn; performed sentiment analysis on financial news using NLTK showcasing quantitative and NLP skills.

Fitness Metrics Dashboard | Web-based Application | Python **Aug 2019 - Sept 2019**

- Build a responsive fitness dashboard using Django, Chart.js for visualization and PostgreSQL as a database.
- Showcased dashboards, allowing user to easily track and monitor step count, calories burnt, distance covered and workout duration.
- Used Docker to improve deployment time by 50%. Reducing environment configuration issues by 70% and increasing scalability, resource utilization and code consistency.