Sonali Bante

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Education

Master of Science in Computer Science | Texas State University at San Marcos, TX — December 2020
Bachelor of Engineering in Electronics Engineering | Yeshwantrao Chavan College of Engineering at Nagpur, India — March 2017

Key Skills

Languages: Java, Python, C/C++, Elixir, Erlang, PL/SQL, HTML, CSS, JavaScript (jQuery, XML, JSON), AJAX
Frameworks & Libraries: NodeJS, React, Express, W2UI, Bootstrap, Phoenix, Cowboy, Spring
APIs: OpenGL, REST, SOAP
Databases: PostgreSQL, MySQL, Oracle
Tools and Technologies: Docker, Dbeaver, Visual Studio, RabbitMQ, Jenkins, Adobe Experience Cloud (AEC), Adobe Commerce (SEO)
Methodologies: Agile (Jira)
Command Line Interfaces (CLI): RedHat, CentOS, Ubuntu (Linux), CMD, PowerShell
Version Control: Git, Jira, SharePoint, StarTeam

Professional Experience

Software Engineer II | *Wabtec Corp, Remote, Maryland* — *June 2022 - June 2024*

Following Wabtec Corp's acquisition of our team from Collins Aerospace:

- Engineered and debugged a GUI-based web design tool powered by an Erlang REST API using the Cowboy library for the PIMS project, enabling user customization of GDS and station platform signs, and enhancing operational efficiency.
- Devised advanced filters by applying custom algorithms on the client side to manage large datasets of railway artefacts, optimizing data retrieval and user experience.
- Enhanced and reduced the LOC to support the operational scalability of Sound Transit, writing modular code to reduce future development time by 50%.
- Created a user activity log by implementing REST APIs and middleware with Elixir to monitor user activity and improve error handling, enhancing bug reporting and system usability by 25%.
- Developed APIs to compute transit routes and ETAs using GTFS and TCS data, significantly augmenting time management for users.
- Established CI/CD pipelines using Jenkins to automate the deployment process and production, ensuring consistent and efficient delivery of updates.

Software Developer I | *Collins Aerospace, Raytheon Technologies,* Annapolis, Maryland — *May 2021 - June 2022*

- Revamped the front-end interface on the AIM-CIS platform by incorporating design elements from the PIMS platform and improving UI/UX, resulting in a user-friendly and visually appealing experience.
- Upgraded the AIM-CIS platform and Minnesota SWRL by enhancing the spell-checker capability and developing a custom dictionary with regular expressions, which increased text accuracy and user efficiency, leading to a 20% reduction in spelling errors and enhanced overall user satisfaction.
- Utilized XML-based scripting to generate dynamic SQL statements, effectively populating PostgreSQL and Oracle databases by converting and categorizing customer messages, resulting in improved data accuracy and optimized database performance.

Software Developer Intern | *Numeraxial LLC, Flushing, New York* — *June 2020 - December 2020*

- Boosted customer satisfaction by integrating diverse market data from multiple financial data APIs, overcoming the challenge of processing large volumes of XML-formatted data, and enhancing the data feed to the web client for real-time updates and accuracy, resulting in increased user retention and positive feedback.
- Designed and implemented an intuitive dashboard for the investment platform using React and D3 libraries, addressing user feedback and significantly enhancing the user experience by providing interactive and real-time data visualizations, resulting in a 30% increase in user engagement and satisfaction.

Graduate Research Assistant

Department of Engineering, Texas State University, San Marcos, Texas — October 2018 - May 2020

- Engineered a multi-user scheduling and booking system for the Makerspace Lab with WordPress WAMP stack and free plugin integration to adhere to budget constraints, facilitating maintenance by non-IT personnel, improving operational efficiency by 40% and optimising resource utilization.

Activities

- 100% Travel Grant for Paper Published on ‘Changing Homework Achievement with Mechanix Pedagogy’ in the American Society of Engineering Education (ASEE) Annual Conference in Tampa, Florida, June 2019.
- Served as the Editor-in-Chief of ElectroNewsLine, Monthly Magazine of the Engineering Department, YCCE from 2015-2016.