Vinoth Balaji

Associate Technical Lead - Full Stack

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As an innovative and results-driven Full Stack Developer with over 5.5 years of experience, I have a proven track record in delivering cutting-edge solutions using both MEAN and Django stacks. My expertise lies in end-to-end web application development, encompassing strong skills in front-end and back-end components, as well as Docker-based deployment. With a passion for technical leadership and collaboration, I consistently deliver high-quality solutions that meet diverse client needs.

Skills

- Angular (V.13)
- PostgreSQL
- HashiCorp Vault
- Node JS (Express)
- Nginx
- Microsoft AD SSO
- Python (Django)
- Highcharts
- Redis
- Mongo DB
- Docker, Docker Compose
- Websockets, JIRA, JWT

Soft Skills: Leadership, Collaboration, Problem-Solving, Time Management, Adaptability

Languages: English (Proficient), Hindi (Proficient), Tamil (Native/Bilingual), Telugu (Native/Bilingual)

Work Experience

Flutura Decision Sciences & Analytics. Bangalore, India (Soon to be acquired by Accenture)

Oct 2017 - Present

Associate Technical Lead - Full Stack

Apr 2021 - Present

Cerebra Engineer's Workbench

EWB is a low-code/no-code platform that streamlines data analysis for engineers and analysts. The platform is specifically designed to analyze data generated by systems, equipment, and processes throughout the R&D to customer service life cycle, providing a comprehensive solution for the core engineering domain.

Tech Stack: PostgreSQL, MEAN Stack, Python(Django), Docker, Nginx, Redis, HashiCorp Vault

- Implemented Node.js with the Express framework as middleware to seamlessly connect the front-end UI with the Django back-end, allowing for secure user authentication and authorization via password and Azure AD SSO using JWT and OAuth. Resulted in a significant improvement in user experience and platform security.
- Reduced the initial loading time of Canvas/Workbook by 70% by implementing performance optimization techniques such as lazy-loaded components, on-demand loading, and container image replacement. This led to faster loading times and a smoother user experience.
- Developed a custom logger application from scratch to obtain user behavior statistics and facilitate debugging. This resulted in a more efficient platform and ensured smooth operation.
- Streamlined deployment processes and improved portability by containerizing the application using Docker, saving time and effort during deployment and ensuring consistent operation across different environments.
- Created a Template module for efficient packaging of workbooks into a single executable, enabling users to easily customize inputs with various sources and configurations and execute the entire package with one click. This resulted in significant time and effort savings for users.
- Collaborated with cross-functional stakeholders, including product managers and end-users, to conceive and design innovative features that enhanced the overall value of the platform, leading to a more user-friendly platform and an improved customer experience.
- Led the design, development, testing, and deployment of the highly generic and config-driven Output Engine module, enabling users to interact with visual outputs in the form of charts and tables. This resulted in more efficient data analysis and improved decision-making for users.
- Conducted security audits, identified vulnerabilities, and implemented necessary fixes to ensure the platform's security and compliance with industry standards. This led to a significant improvement in the platform's overall security posture and reduced the risk of data breaches.
- Optimized the platform's features for high performance and quick load times, ensuring a seamless and intuitive user experience. This resulted in increased user satisfaction and improved customer retention.

- Collaborated with the product team to design and develop the Packaging and Prediction module, allowing users to package and employ ML toolboxes for accurate outcome predictions with alternate data sources. This led to more accurate predictions and better decision-making.
- Strengthened platform security with robust measures to protect sensitive data, prevent unauthorized access, and mitigate session hijacking risks.
- Designed, developed, tested, and deployed Aggregation Framework for single-chart visualization of large datasets, significantly improving data analysis and informed decision-making.
- Developed comprehensive documentation and provided training to users and team members, improving user adoption and reducing ongoing support and maintenance needs, resulting in time and cost savings.

Senior Programmer

Jan 2020 - Mar 2021

Cerebra Engineer's Workbench

- Developed a highly customizable set of charts and graphs with the Widget module, enabling users to easily analyze visual data. This streamlined data analysis, increased accuracy, and saved users valuable time.
- Boosted user experience by implementing real-time communication with WebSockets and Redis, instantly delivering up-to-date information and notifications to users. This ensured that users were always informed of critical updates and helped them stay on top of their work.
- Revolutionized the user experience by introducing cutting-edge features such as customizable annotations, seamless zooming, and synchronized charts. These features transformed the data analysis process, enabling users to identify trends and insights quickly and make data-driven decisions easily.
- Mentored junior team members on various platform modules, providing technical guidance and conducting code reviews to ensure adherence to best practices and standards. This helped develop the team's skills and knowledge, resulting in increased productivity and superior quality of work.
- Optimized the platform's features for high performance and quick load times, providing a seamless and efficient user experience. This led to faster and more effective data analysis and enhanced user satisfaction.

Programmer

Sep 2018 - Dec 2019

Quality Applications

Tech Stack: PostgreSQL, MEAN Stack, Python(Django), Docker, Nginx

- Successfully led the migration of applications from jQuery to MEAN stack, resulting in improved performance and maintainability. This saved the company's maintenance costs and improved user experience.
- Collaborated with UX designers to enhance UI/UX design, resulting in a more user-friendly experience. This increased user engagement and satisfaction, leading to a better platform overall.
- Spearheaded the design and development of the entire front-end application from the ground up using Django, Node, and Angular frameworks. This ensured the platform was built using the latest and most efficient technologies, resulting in a more modern and efficient product.
- Implemented a robust user authentication system and reusable Filters module across web pages. This improved security and ensured consistent functionality across the platform, enhancing user experience.
- Mentored team members on technical design, optimization of APIs, and debugging to meet customer requirements. This strengthened the team's skills and knowledge, leading to improved overall productivity and quality of work.
- Collaborated with product managers and users to design new features that added value to the platform, and conducted bi-weekly customer calls for requirements gathering. This ensured that the platform met customer needs and added value to their work processes, resulting in higher customer satisfaction.

Programmer

Oct 2017 - Aug 2018

Supply Chain Management

Tech Stack: MSQL, Angular JS, jQuery, Python(Django), SSIS

- Proactively facilitated weekly customer calls and expertly coordinated monthly data loads to ensure seamless alignment with customer needs and deliver accurate information.
- Conceptualized and spearheaded the design and deployment of the Batch Module dashboard, enabling stakeholders to gain unparalleled insights into company performance at the batch level.
- The significantly improved user experience by optimizing the filter module for lightning-fast performance and seamless load times.
- Took charge of enhancing the application's responsiveness to different devices and screen sizes, resulting in a universally accessible and seamless user experience.
- Drove the development of REST APIs that seamlessly integrated the application with external systems, while expertly troubleshooting and resolving customer-reported bugs and issues.

Education

GANADIPATHY TULSI'S JAIN ENGINEERING COLLEGE

Aug 2013 - July 2017

- Bachelor of Engineering in Computer Science

CGPA - 8.12