

# GANESH DEVANAKA

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Portfolio: <https://ganeshdevanaka.github.io/Portfolio/>

## SUMMARY

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- Full Stack Developer with 4 years of experience in developing enterprise-level applications and delivering high-impact solutions across various domains.
- Proficient in frontend technologies including ReactJS, React Hooks, and Context API, creating responsive and intuitive user interfaces that enhance user experiences.
- Experienced in backend development with Node.js and Express.js, managing databases such as PostgreSQL and MongoDB to ensure scalable and efficient data solutions.
- Demonstrated ability to improve application performance through asynchronous programming, data validation, and API optimization, achieving significant efficiency gains.
- Experienced with cloud and DevOps technologies including AWS, Docker, Kubernetes, Jenkins, and Git, optimizing development workflows and ensuring reliable, scalable deployment.
- Proven track record in establishing CI/CD pipelines, automating testing and deployment processes to reduce time-to-market and maintain high standards of code quality.
- Adept in Agile and Scrum methodologies, driving project efficiency with precise estimates, effective schedule management, and successful delivery of projects.
- Strong focus on security best practices, including implementing OAuth2, JWT, and encryption to ensure secure API authentication and data protection.

## TECHNICAL COMPETENCIES

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- **Programming Languages:** Python, Core Java, Apex and JavaScript.
- **Web Technologies:** HTML5, CSS3, Node.js, Express.js, ReactJS, jQuery and Bootstrap.
- **Cloud & DevOps Technologies:** Amazon Web Services, Salesforce, Jira, Docker, Kubernetes, Jenkins and Git.
- **Databases:** Oracle DB, SQL, PostgreSQL, MongoDB.

## EXPERIENCE

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### GRADUATE RESEARCH ASSISTANT – UNIVERSITY OF MISSOURI, COLUMBIA, MISSOURI.

August 2022 – May 2024

#### IRNet – A tool for Cancer Treatment Prediction: -

- Developed user interfaces using ReactJS focusing on optimal performance, accessibility, and responsive design. Implemented React Hooks, Context API, and React Router to enhance component reusability and navigation efficiency.
- Integrated data-driven features by leveraging Redux for advanced state management and Axios for seamless API integration, which significantly improved application scalability and maintainability.
- Engineered backend APIs with Node.js and Express.js, utilizing a well-optimized schema on PostgreSQL. Applied data validation to ensure data integrity, API versioning to manage different versions of APIs, and file handling for uploads and downloads.
- Optimized server performance through asynchronous programming and an event-driven architecture, enhancing response times and throughput. Employed Express.js middleware to create modular, maintainable, and secure code.
- Established CI/CD pipelines using Jenkins and GitLab CI/CD, automating development workflows, code testing, and deployment processes. This automation significantly reduced time-to-market and ensured consistent, high-quality code releases.
- Implemented containerization with Docker and orchestration using Kubernetes, improving deployment consistency and scalability. Designed and maintained Docker images and Kubernetes configurations to facilitate seamless application scaling and high availability.

#### FatPlants –

- Fatplants is a web portal that offers analysis and visualization tools for plant fat-related genes, proteins, and metabolism. we used ReactJS to build dynamic and responsive user interfaces, leveraging React Hooks to provide an efficient and interactive user experience. On the server side, I developed robust functionality using Node.js and Express.js, and optimized SQL queries to improve data processing and management efficiency.

### Application Development Analyst - Accenture Solutions Private Limited, India

June 2020 – June 2022

- Developed RESTful APIs with Express.js, resulting in a 20% improvement in API response times. Optimized data interactions and simplified database operations using Mongoose for Object-Document Mapping (ODM).

- Engineered real-time communication features using Socket.io with Node.js, ensuring high uptime and significantly enhancing user engagement through seamless and instantaneous data updates.
- Automated deployment workflows with Git and Jenkins, resulting in zero downtime and a 30% faster release cycle. Employed Docker for containerization, streamlining deployment, and ensuring consistent environments across development and production.
- Designed and developed dynamic UI components with React, leading to a 35% increase in conversion rates and enhanced user experience. Utilized Redux for effective state management in complex applications, optimizing data flow and application performance.
- Optimized MongoDB database interactions, achieving 15% faster query responses and improved data processing efficiency. Developed and maintained efficient database schemas and applied performance tuning techniques to enhance query performance.
- Conducted thorough requirement gathering and analysis by collaborating with stakeholders to understand business needs and translating them into technical specifications. Created detailed documentation and use cases to ensure alignment between business objectives and technical implementation.
- Applied security best practices, including implementing OAuth2 and JWT for secure API authentication and authorization. Conducted vulnerability assessments and applied security patches to safeguard applications against potential threats. Implemented encryption for data at rest and in transit to ensure data integrity and confidentiality.
- Participated in all stages of the Software Development Life Cycle (SDLC), including design, coding, testing, and implementation, following Agile methodology.
- Employed Agile methodology and Scrum practices to provide accurate estimates, improve efficiency, and maintain project schedule control.

#### **Salesforce Application Support - Accenture Solutions Private Limited, India**

**June 2019-May 2020**

- Configured validation and workflow rules, as well as Salesforce security settings (Profiles, Roles, OWD, Sharing Rules, Permission Sets, and Apex Sharing) to ensure data integrity and appropriate access control.
- Designed and customized Salesforce components, including custom objects, fields, page layouts, tabs, validation rules, workflows, Process Builder, Flows, Reports, and Report Types to meet business requirements.
- Conducted data migration using tools like Data Loader, Salesforce Inspector, and Import Wizard, managing data across sandbox environments.
- Developed and optimized test classes to improve code coverage, ensuring the reliability and quality of Salesforce applications before deployment to QA.
- Troubleshoot and debugged issues proactively, proposing and implementing innovative solutions for process improvements.
- Collaborated with onsite customers to understand their requirements, providing tailored solutions and facilitating effective communication.
- Managed incidents and change requests efficiently, conducting User Acceptance Testing (UAT) and obtaining sign-off from users in QA environment before production deployment.

### **ACADEMIC PROJECT PROFILE**

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#### **Real-time Fatigue Detection System**

- Developed a real-time fatigue detection system using facial feature analysis, Viola-Jones algorithm, and template matching to monitor drivers' eyes, mouth, and head movements, aiming to prevent drowsy driving accidents. Implemented skin segmentation for illumination invariance, achieving efficient drowsiness detection with significant potential to enhance road safety.

#### **Twitter Data Analysis of FIFA World Cup**

- Conducted comprehensive Twitter data analysis during the FIFA World Cup, leveraging Python, Twitter API, and Spark tools to extract insights from extracted tweets. Developed skills in data collection, preprocessing, and analysis, demonstrating a proficiency in data-driven decision-making.

### **EDUCATION**

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- **University of Missouri**, Columbia, USA Master of Science, Computer Science