Gautham Yerroju
Software Engineer | Product Engineering | Systems Design | AI-Assisted Development
Phone: +91 9849685875 | Email: gyerroju@gmail.com | www.linkedin.com/in/gautham-yerroju

PROFESSIONAL SUMMARY:

Highly adaptable software engineer experienced in building applications, distributed services, data systems and engineering automation.

- Translate ambiguous requirements into technical specifications, system designs and actionable implementation plans.
- Design modular systems and evaluate trade-offs across complexity, maintainability, performance and reliability.
- Own engineering work from requirements and implementation to testing, deployment and troubleshooting.
- Apply evidence-driven engineering through reproducible testing, performance benchmarking, technical research and independent verification.
- Direct AI coding agents through structured requirements, bounded tasks and explicit architectural constraints while retaining responsibility for code quality and technical decisions.

ENGINEERING CAPABILITIES

Product and Requirements Engineering
- Product discovery, requirements analysis, functional specifications and edge-case identification.
- Translating business needs into technical designs while balancing scope, usability and complexity.

Architecture and Systems Engineering
- Modular application design, API design, service integration and data modelling.
- Architectural trade-offs, scalability, performance and operational reliability.

Quality and Engineering Discipline
- Test strategy, automated testing, regression prevention and reproducible debugging.
- Performance benchmarking, evidence-based validation, maintainable code, incremental refactoring, technical documentation and version control.

AI-Assisted Software Development
- Directing coding agents through explicit requirements, architecture and implementation boundaries.
- Breaking down complex work into reviewable tasks and independently validating generated changes.
- Reviewing agent-generated tests, challenging technical recommendations and maintaining project context.

Collaboration and Delivery
- Cross-functional coordination, technical problem-solving, knowledge sharing.
- End-to-end ownership of engineering deliverables across teams and development environments.

SELECTED ENGINEERING EXPERIENCE

- AWS: Coordinated deployment of compute capabilities across four regions for a service supporting over 100,000 instances per day, working with engineering teams, API teams and technical program managers.
- CA Technologies: Independently owned a web application from requirements and system design through UX, development, testing and deployment.
- Odoo: Owned application modules and client projects end-to-end, supporting more than a dozen clients.
- FactSet: Developed a Python-based test automation framework that reduced manual QA effort by more than 50%.

EDUCATION SUMMARY:
- Master of Science in Computer Science & Engineering from University of Nevada, Reno, USA, 2018
- B. Tech in Computer Science & Engineering from Jawaharlal Nehru Technological University Hyderabad, 2011

PROFESSIONAL EXPERIENCE

SoftQuip Technologies, CA **Apr 2025 – Apr 2026**
Full Stack Engineer

- Worked with multiple clients on modernization and cloud-native projects.
- Modernized employee portal platform using Vue.JS and Node.js, and Python, enabling scalable tooling for internal operations.
- Designed cloud-native systems using Lambda, ECS, and CloudFormation for serverless services.
- Containerized backend services with Docker and implemented automated deployment pipelines supporting horizontal scaling.
- Used AI coding agents as implementation partners for quick prototyping and iteration, and requirements refinement.

Amazon Web Services, CA **Jan 2023 – Feb 2025**
System Development Engineer L5 – AWS Cloud / Infrastructure Engineer

- Owned components of an internal initiative to convert various CloudFormation deployments to work with end-to-end automated deployment.
- Converted Spring Boot application code for AWS Glue's compute API layer to support automated deployment.
- Led the deployment of the AWS Glue service to 4 new regions including YYC, by coordinating multiple technical and API teams, working with TPMs, deploying services and tests, setting up alarms, and health monitoring.
- Provisioned and managed compute resources for 100,000+ instances/day, supporting diverse usage and latency profiles.
- Deployed Spring Boot backend microservices, containerized with Docker, orchestrated via Kubernetes (EKS) for high scalability and availability.
- Owned VM fleet security patching for internal APIs and ensured compliance with security standards.
- Enhanced and scaled AWS Glue fraud-handling capabilities using CloudFormation, Lambda, ECS, EKS, and other AWS services.
- Worked in a CI/CD-driven environment, managing multiple pipelines and frequent releases.
- Collaborated daily with global engineering, TPMs, and operations teams to deliver reliable, scalable AWS services.

Meta, CA **Sep 2021 – Dec 2022**
Senior Data Engineer

- Designed and implemented scalable data pipelines and internal process improvements, automating manual workflows and optimizing data delivery.
- Developed and maintained ETL pipelines from sources such as SQL databases and APIs, using Hive, SQL, and Python for extraction, transformation, and loading.
- Built analytics tools and dashboards with Tableau and Daiquery, delivering actionable insights on utilization and demand forecasting of network capacity.
- Ensured data quality and consistency by collaborating with stakeholders to identify and resolve discrepancies.
- Conducted technical interviews and mentored new engineers, enhancing ramp-up time and team productivity.
- Converted team's process to Agile and Scrum by mapping the technical roadmap to epics and stories.

Corpay Inc., CA **Sep 2020 – Sep 2021**
Full-Stack Engineer

- Designed and developed an online credit card management system, enhancing user experience and streamlining user and developer workflows.
- Owned and developed components of a reactive front-end framework (React.JS-like but internally developed) while refactoring legacy code for scalability, maintainability, and performance.
- Streamlined Login and New User Registration workflows by working with product owners, and implemented OAuth.
- Added unit and integration tests using Jest, ensuring robust front-end reliability.
- Worked daily with design, back-end, API, network, and QA teams to deliver results in quick iteration.
- Worked in Agile environment, using Jira, Confluence, and Figma, to deliver end-to-end solutions.

Odoo Inc., CA **Oct 2018 – Jan 2020**
Full-Stack Engineer

- Designed, developed, and maintained full-stack business applications using Odoo open-source framework, including front-end UI, back-end logic, and database integration.
- Migrated and onboarded data and code from legacy systems into upgraded application versions, ensuring smooth client transitions.
- Helped over 50 clients solve technical roadblocks and design application workflows, as a subject matter expert.
- Independently managed projects, taking ownership of modules and end-to-end solution delivery, including architecture, implementation, and testing.
- Delivered technical training sessions on the Odoo framework for multi-national cross-domain audiences, promoting client self-sufficiency.
- Was chosen to present at Odoo Connect 2021 conference on API integrations and solution design.

University of Nevada, NV **Aug 2016 – Oct 2018**
Research Assistant – Data Engineer

- Worked with NetApp, Inc. to develop disk failure prediction models for large-scale data centers.
- Performed time-series analysis and spatial/temporal characterization of disk failures using real-world big data storage datasets.
- Leveraged classical methods to build algorithms with cheap performance cost for efficient failure prediction.
- Built custom simulations and tested predictive algorithms on production-scale datasets.
- Developed ETL pipelines and data processing workflows using Python, Pandas and NumPy to speed up analysis.
- Created interactive dashboards and visualizations using Matplotlib and VueJS to monitor system metrics and model predictions.
- https://gauthamyerroju.com/downloads/papers/THESIS_Gautham.pdf

CA Technologies, India **Dec 2015 – Jul 2016**
Full-Stack Web Developer

- Designed, developed, and deployed a full-stack web application to conduct quarterly surveys and aggregate results on an interactive dashboard.
- Individually owned the entire project lifecycle, including requirements analysis, system design, UX and UI design, development, testing, and deployment.
- Developed back-end services using Node.js, ExpressJS, and MongoDB (with Mongoose), integrating with Active Directory for authentication and role management.
- Designed and built a responsive (mobile-first) Material Design front-end using ES6, Bootstrap, SCSS, and CSS3, delivering a performant UI with responsive feedback, predictable interaction patterns and design consistency.
- Rapidly learned and applied new tools and best practices to deliver a production-ready solution independently.
- Collaborated with stakeholders to ensure the application met user experience and system integration requirements.

FactSet Research Systems, India **Jul 2011 – Nov 2015**
Senior Test Automation Engineer

- Developed from scratch and maintained an automation framework in Python and IBM STAF for orchestrating test runs, reporting results, and sending notifications.
- Wrote automated test cases using Selenium (web applications) and Test Complete (Windows applications) to ensure broad coverage.
- Integrated the automation framework with internal tools via REST and SOAP APIs.
- Built a web application (PHP, MSSQL, jQuery) for QA teams to schedule tests and view individual and aggregated results.
- Reduced manual QA effort by over 50%, increasing defect detection and product coverage.
- Interviewed, trained and mentored new hires on frameworks, best practices, and automated testing.
- Consistently recognized for outstanding performance in every review.