Saarthak Mudigere Girish

SOFTWARE ENGINEER

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SUMMARY

- Software Engineer and DevOps Engineer with over **3+ years** of experience designing scalable web applications, automating CI/CD pipelines, and managing cloud-native services on AWS and Azure.
- Proficient in full-stack development using React.js, Node.js, .NET, Flask, and Express.js with deep experience in microservices architecture and REST/GraphQL APIs.
- Skilled in deploying containerized applications using Docker, AWS (ECR, ECS, Fargate), and Azure DevOps with infrastructure automation via Terraform and GitHub Actions.
- Expertise in orchestrating containerized workloads with ECS and defining cloud infrastructure as code using Terraform, enabling scalable and reproducible application environments on AWS.
- Strong command of SQL, PostgreSQL, MongoDB, and Redshift for building performant data pipelines and backend integrations in high-throughput environments.
- Collaborated cross-functionally with product, QA, and DevOps teams in Agile settings to deliver 30+ production-ready features and 10+ internal tools with measurable impact.

TECHNICAL SKILLS

- **Programming Languages:** Python, Java, C++, C#, JavaScript, TypeScript, Shell Scripting, SQL, HTML, CSS
- **Web & Application Development:** React.js, Next.js, Node.js, Express.js, Flask, .NET, MERN Stack, RESTful APIs, GraphQL, SOAP
- **Databases & Storage:** Oracle Database, MySQL, PostgreSQL, MongoDB, Amazon Redshift, DynamoDB, Redis, SQL Server Management Studio
- **Cloud Platforms & DevOps:** AWS, Azure DevOps (ADO), Google Cloud Platform (GCP), Docker, Kubernetes, Terraform, Ansible, Jenkins, GitHub Actions, Maven
- **CI/CD & Monitoring Tools:** Vercel, GitHub, CloudWatch, Prometheus, Grafana, CI/CD Pipelines, DevOps Automation
- **Testing & Automation:** Tosca (Vision AI), ESLint, Unit Testing, Automated Deployment Scripts
- **Tools & IDEs:** Visual Studio Code, JetBrains PyCharm, Visual Studio, Jira, Microsoft Teams
- **Development Methodologies:** Agile, Scrum
- **Areas of Expertise:** Full-Stack Development, Backend Engineering (Node.js, Flask), Cloud-Native Architecture, Infrastructure as Code (IaC), Web Application Security, API Development & Integration

EDUCATION

The University of Texas at Arlington	**Texas, USA**
Master of Science in Computer Science	Jan 2023 – Dec 2024
Visvesvaraya Technological University	**Karnataka, India**
Bachelor of Engineering in Computer Science and Engineering	Aug 2018 – Jul 2022

PROFESSIONAL EXPERIENCE

Kaytics	**TX, USA**
Software Engineer	**Mar 2025 – Current**

- Architected and developed a real-time monitoring **dashboard** using **React.js**, providing live operational insights and reducing incident response time by 30%.
- Containerized **RESTful APIs** with Flask and **Docker**, enabling real-time data access across four internal tools with sub-200ms latency.
- Deployed and managed containerized microservices on AWS ECS with Fargate, implementing dynamic auto-scaling policies that improved application availability by 25% during peak traffic.
- Designed SQL queries and optimized indexing in PostgreSQL and **Redshift**, cutting dashboard load times by 30% for business-critical reporting.
- Built and maintained reusable Infrastructure as Code (IaC) modules using **Terraform** and automated the entire **CI/CD** lifecycle with GitHub Actions, enabling consistent, one-click deployments across multiple environments.
- Automated ticket classification workflows using rule-based logic, improving support ticket routing and saving 3+ hours/day in manual triage.
- Maintained Dockerized applications deployed on **AWS ECS** and Azure **DevOps** pipelines, ensuring high availability and consistent deployment.
- Collaborated with cross-functional teams to align backend data outputs with business KPIs, increasing stakeholder confidence in reporting systems.

Nucor Corporation	**TX, USA**
Software Engineer	**May 2024 – Dec 2024**

- Architected scalable microservices using **Node.js** and **Express.js** to support production control systems, handling over 25,000 real-time equipment events daily.
- Refactored legacy backend modules into modular **RESTful APIs**, reducing API response time from 3.4 to 1.2 seconds and improving system maintainability.
- Integrated **PostgreSQL** and **MongoDB** databases for hybrid data storage needs, streamlining data access workflows across 4 manufacturing applications.

- Automated deployment pipelines with **GitHub** Actions and Docker, saving 10 engineer-hours per week and reducing deployment failures across environments.
- Collaborated with front-end developers and QA engineers to deliver 15+ production-grade UI features using **React.js** and **TypeScript** for internal operations portals.
- Monitored application health using **Prometheus** and **Grafana**, setting up real-time alerts that reduced production outages by enabling proactive response.
- Contributed to **Terraform-based infrastructure** as code (IaC) modules, facilitating reproducible infrastructure setup for 3 new application environments.
- Documented system **architecture**, API schemas, and CI/CD workflows in Confluence, improving onboarding time for new engineers by 4 days.

Dell Technologies   **India**
Software Engineer   **Sep 2021 – Dec 2022**
- Engineered responsive internal portals using React.js and TypeScript to manage IT asset tracking, delivering 18+ dynamic UI components across 4 business units.
- Refactored monolithic services into RESTful microservices using **.NET Core** and PostgreSQL, improving deployment agility and reducing bug resolution time by 5 hours/week.
- Developed automation scripts in **PowerShell** and Bash to streamline build processes, saving 8 manual hours per sprint across QA and DevOps teams.
- Integrated Azure DevOps CI/CD pipelines with Dockerized services, reducing application release time from 6 hours to under 1 hour across environments.
- Collaborated with UX designers, product managers, and **QA engineers** to launch 3 enterprise tools, ensuring smooth cross-functional coordination from planning to deployment.
- Monitored application health and backend latency using Prometheus and Grafana, resolving 12+ high-severity production incidents with root-cause diagnostics.
- Documented system architecture, API contracts, and service flows in Confluence and Swagger, improving development handoff efficiency by 4 days.
- Mentored 2 junior developers on clean coding practices, **Git** workflows, and backend logic implementation, accelerating onboarding and team velocity.

Trigent Software   **India**
Software Engineer Intern   **Feb 2021 – Aug 2021**
- Developed internal tools in **Python** and **Flask** to automate report generation tasks, saving 6 hours weekly for the QA and data reporting teams.
- Built custom dashboards using **JavaScript, HTML**, and **Chart.js** to visualize client KPIs, enabling better reporting and stakeholder engagement.
- Created REST APIs to integrate third-party HR systems with internal databases, reducing manual data entry errors across 2 client environments.
- **Tested** and validated application workflows using **Selenium**, improving UI test coverage by 40 functional scenarios.
- Participated in **Agile** stand-ups and sprint retrospectives, contributing to 3 successful client deliverables within 6 months.
- Assisted senior developers in debugging backend services and writing modular code in Node.js, enhancing team productivity.
- Managed **Git** repositories and pull requests for collaborative development, ensuring code version integrity across 3 ongoing modules.
- Documented API endpoints and test cases in **Swagger** and Excel, supporting knowledge transfer during team handoffs.

PROJECTS

LinkedIn AI Detector Chrome Extension
- Developed a **SaaS** Chrome extension to evaluate LinkedIn post authenticity by analyzing and scoring AI-generated content in real time.
- Integrated **GroqCloud's LLM API** with backend logic to detect synthetic language patterns and deliver precise AI content detection results.
- Built and deployed a Node.js backend using Express.js to handle API requests with optimized latency and scalable performance.
- Leveraged Chrome Extension APIs to capture and preprocess user-posted content, ensuring seamless browser integration.
- Delivered a lightweight, responsive tool that enhanced user trust and transparency by providing instant AI detection feedback.

E-commerce CI/CD Pipeline
- Designed and implemented an end-to-end CI/CD pipeline for a React.js-based e-commerce application using GitHub Actions for automated build and deployment.
- Containerized the frontend application with Docker and pushed images to **AWS ECR** for secure and scalable cloud deployment.
- Deployed the application using AWS ECS with Fargate, leveraging **AWS ELB** for seamless traffic distribution and zero-downtime releases.
- Enabled full automation of testing and deployment stages, eliminating manual processes and reducing engineering overhead by 10+ hours per week.
- Ensured consistent and repeatable release cycles with infrastructure-as-code principles, improving **deployment** reliability across dev and prod environments.

CERTIFICATION
- AWS Certified Solutions Architect – Associate (SAA-C03) | **Amazon Web Services**
- Microsoft Certified: Azure Fundamentals (AZ-900) | **Microsoft**