Sri Nikhil Reddy Gudibandi

Boston, MA | (704) 698-6665 | srinikhilrg@gmail.com | linkedin.com/in/sri-nikhil-reddy/ | GitHub | Portfolio

SUMMARY

Software Engineer with over 6 years of experience in developing dynamic web applications, optimizing data workflows, and enhancing application security. Proficient in full-stack development, cloud technologies, and security tools with a proven track record of delivering scalable solutions and resolving critical system issues. Skilled in collaborating with cross-functional teams, mentoring students, and deploying innovative AI-powered platforms.

PROFESSIONAL EXPERIENCE

Security and Product Development Engineer Intern | Stiisk LLC, Boston, MA   **August 2024 - December 2024**

- **Developed a dynamic web application MVP** for robotic education, leveraging Three.js, JavaScript, and Firebase to create interactive and engaging learning experiences for students.
- **Achieved faster load times and resolved timeout errors for large 3D models** by optimizing the rendering process through code modularization and data partitioning, ensuring seamless user experience even with complex datasets.
- **Improved cross-browser compatibility for 3D model loading** by transitioning data storage from localStorage to Firebase and implementing a hybrid data fetching strategy. This enabled efficient data retrieval, reduced latency, and ensured consistent rendering across multiple browsers.
- **Improved user experience and transaction reliability** by deploying multiple Google Cloud Run functions to handle Stripe integration, including checkout and webhook endpoints for efficient event processing.
- **Enhanced application security and code quality** by conducting risk assessments and implementing security protocols using SonarQube, detecting vulnerabilities, and ensuring high-quality code standards.
- **Streamlined electronics design workflows** by building and deploying multiple AI agents into Google Cloud using Cloud Run containers, enabling seamless user interactions.

Teaching Assistant | Boston University, MA   **September 2023 - December 2023 | September 2024 - December 2024**

- **Supported teaching activities for Software Quality, Testing, and Security Management courses**, assisting in lectures, grading assignments, and clarifying complex concepts for students.
- **Guided 24 student teams through semester-long group projects**, mentoring them on applying software engineering principles to design and develop real-world software systems.
- **Facilitated collaborative learning** by organizing discussions on software quality assurance, testing methodologies, and security practices.
- **Resolved student challenges by conducting one-on-one and team meetings**, providing targeted suggestions to overcome technical, documentation, and collaboration blockers, thereby ensuring project continuity and team cohesion.

Software Engineer | Capgemini, India   **January 2021 - July 2022**

- **Ensured timely delivery of critical business reports** by administering and monitoring over 3,000 Informatica jobs using AutoSys, resulting in accurate data processing and seamless reporting via Tableau.
- **Achieved a 99% resolution success rate for critical job failures within SLA** by leveraging ServiceNow for incident management and implementing prompt troubleshooting processes.
- **Maintained uninterrupted workflow execution** by providing L1 and L2 production support, troubleshooting batch processes, and resolving system issues to minimize downtime.
- **Upheld data integrity and ensured seamless data flow** by managing production servers, orchestrating Informatica workflows, and proactively addressing data corruption risks.
- **Restored 2–3 million lost records during weekend recovery operations** by leading efforts with Microsoft SQL Server, IBM DB2, PostgreSQL, and executing bash scripts alongside Informatica jobs.
- Delivered end-to-end **Knowledge Transfer (KT) sessions** to onboard and train new team members multiple times, ensuring smooth transitions and continuity in project execution.

Core Team Member | Global Child Prodigy Awards, India   **January 2017 - December 2020**

- **Migrated sensitive client data from Google Sheets to Firebase**, enhancing data security through encryption, real-time updates, and access control, while ensuring strict confidentiality and scalability for cross-functional collaboration.
- **Developed a web application with HTML, CSS, and JavaScript**, integrating Firebase for real-time data access to streamline interactions and maintain consistent communication with VIPs, clients, and nominees.
- **Developed a chatbot using Flask and NLTK**, integrated into the company's website to process user queries in real-time, enhancing engagement and automating customer support.
- **Collaborated closely with the Founder and CEO** to translate the organization's vision into actionable plans, contributing to the execution of key initiatives and strategic goals.
- **Facilitated communication and updates for VIPs, clients, celebrities, and nominees**, ensuring they remained informed about company activities and played active roles in organizational growth.

Sri Nikhil Reddy Gudibandi

Boston, MA | (704) 698-6665 | srinikhilrg@gmail.com | linkedin.com/in/sri-nikhil-reddy/ | GitHub | Portfolio

SKILLS

Languages:	Python, C++, MySQL, JavaScript, HTML, CSS, React, Node.js, Express.js.
Tools & Platforms:	Unix/Linux, Git, GitHub Actions, Pivotal Tracker, Informatica, Tableau, PostgreSQL, Microsoft SQL Server.
Cloud:	Google Cloud Platform, Firebase.
Security tools:	Splunk, SonarQube, OWASP ZAP, Nessus, Wireshark, NMap, BurpSuite.
Certifications:	CompTIA Security+ (SY0-701), Google Cybersecurity Professional.

PROJECTS

Periodic Table AI - Interactive Scientific Platform | Next.js, Firebase, Three.js, Gemini AI, TypeScript | **PeriodicTableAI**
- Developed a modern web application prototype with the collaboration with '**MXEnergy Labs**, Shizuoka University, Japan' for the material sciences research lab and researchers using **Next.js and TypeScript** that provides an interactive periodic table with AI-powered element exploration, serving as an scientific tool for chemistry students.
- Architected a serverless backend using Firebase (Firestore, Hosting) with automated CI/CD via GitHub Actions, implementing **custom AI agents** for element analysis and chemical insights.
- Integrated Google's Gemini AI API with custom prompt engineering for real-time element information, achieving dynamic educational content generation through the ElementAgent system.

Secure Development of You.Social | SonarCloud, OWASP ZAP, GitHub Actions, Crypto APIs | **srinikhil0/you_social_763**
- Enhanced security for user authentication and input validation using **PHP and MySQL**, implementing prepared statements to prevent SQL injection and XSS vulnerabilities.
- Conducted **Static and Dynamic Application Security Testing (SAST & DAST)** using **SonarCloud and OWASP ZAP**, reducing critical vulnerabilities by 78%.
- Integrated **PHPMailer and Crypto APIs for email verification**, ensuring secure user registration and account recovery.

PawsitiveID | Angular, Flask, MobileNet, EfficientNet, Firebase, GitHub, Pivotal Tracker | **PawsitiveID**
- Designed and developed an intuitive UI/UX using Balsamiq for wireframing and **Angular** for frontend development, enabling users to seamlessly upload images and receive detailed dog breed analysis reports.
- Implemented machine learning models including **MobileNet and EfficientNet**, achieving 89% accuracy in identifying dog breeds from uploaded photos, with the ability to detect over 120 breeds.
- Deployed the application on **Firebase**, ensuring robust real-time data handling and scalability, optimizing system performance to significantly enhance user experience.

EDUCATION

Master of Science - Computer Science, Security (GPA: 3.54) | Boston University, Boston, MA.
Bachelor of Engineering - Computer Science and Engineering | SIST, India.