Reshma Ghanta

571-353-5883 | reshma.ghanta@gmail.com | Indianapolis, IN | https://www.linkedin.com/in/rghanta2/

Technical Skills

Languages	:	Java, JavaScript (ES6+), SQL
Frontend Technologies	:	HTML5, CSS, ReactJs (Hooks, Context API), AJAX
Backend Technologies	:	Node.js, Express.js, Socket.io, Firebase Functions
Databases & Cloud Storage	:	Firebase Realtime Database, Firestore, Firebase Storage, RDBMS, MySQL, Oracle
DevOps & Hosting	:	Firebase Hosting, AWS (Kinesis Video Streams, IVS), Apache Tomcat
APIs & Integrations	:	REST APIs, Google Maps API, Mapbox API, Twilio API, Speech Synthesis API
Tools & Platforms	:	Visual Studio Code, Eclipse, Postman, Jira, Confluence, GitHub, Bitbucket
Management & Agile	:	Scrum, Sprint planning, KPIs, Risk Management, Stakeholder collaboration

Certifications

- Certified Scrum Master (CSM)
- Oracle certified associate, JAVA SE8 Programmer I

Professional Experience

Full Stack Developer - Covert Alert, Indianapolis, IN — **July 2018 - Present**
E911 Live — **June 2020 - Present**

- Led the development of a cutting-edge **mapping application** integrating **ReactJs**, **Node.js**, and **Firebase,** enabling seamless communication between users and first responders.
- User voice command activates **AWS Kinesis** for live video streaming and **AWS IVS** for live audio streaming. Voice commands are customizable for the users to discreetly unlock the app and start automatic recording.
- Utilized **Firebase realtime database** to track live location of the user by researching and integrating **Mapbox API** for mapping system, resulted in 70% performance boost.
- Optimized real-time data exchange between mobile apps and the mapping system using **Socket.io,** reducing query latency and improving response times by 80%. Designed and enforced **Firebase security** rules and database separation to ensure robust data integrity between end-users and first responders.
- Implemented Firebase rules for robust database security and executed database separation for end-users and first responders to resolve data conflicts.
- Engineered external GPS receiver software using **FetchAPI**, enabling live GPS coordinates on laptops/desktops.
- Implemented **geofencing** capabilities allowed dynamic victim assessments within a 0 to 25-mile radius, improving operational efficiency by 200% compared to the legacy county maps.
- Designed and deployed a real time emergency communication system using **Twilio**, enabling users to send automated distress alerts with live location tracking and audio streaming, significantly improving emergency response coordination.
- Experience in modular programming, developing reusable front-end components using React JS. Implemented and optimized **REST API**s to connect the application to the back-end services.
- Authored and maintained high-level (**HLD**) and low-level design (**LLD**) documentation, streamlining cross-team collaboration and accelerating development cycles.
- Trained and mentored 2 interns on Agile methodologies such as scrum meetings, sprint planning, resource planning and back-end development.
- Led the maintenance of MySQL database reducing data redundancy by 15%.

- Collaborated with the team on migrating legacy applications to ReactJs, resulting in improved scalability and application speed
- Demonstrated the app to 4 Universities out of which 2 already signed up for their students and the discussion with the other 2 are at advanced stages
- Developed two factor authentication for mobile using Firebase MFA and for email using Node mailer.
- Leveraged Certified Scrum Master (**CSM**) expertise to **facilitate Agile ceremonies**, optimized sprint velocity and drive cross-functional team alignment, ensuring **on-time project delivery** and enhanced development efficiency.
- Collaborated with cross-functional stakeholders including first responders, UX designers, backend engineers to align technical alignment with real-world operational needs ensuring high-impact product outcomes.
- Defined and monitored key performance indicators (**KPI**s) to track system efficiency, identify bottlenecks and implement iterative improvements resulting in enhanced application reliability and performance.

911 Mapping System   **July 2018 – June 2020**

- Led the end-to-end development of a sophisticated full-stack application using HTML, CSS, and JavaScript for the front end. Utilized **Express.js** and **Node.js** for the back end, and integrated **Firebase database** for seamless real-time data storage and retrieval.
- Constructed a custom mapping system utilizing the **Google Maps API**, providing an interactive and visually appealing experience for end users.
- Integrated **Amazon Kinesis** Video Streams on the back end to fetch real-time video data, enhancing the user interface with dynamic content.
- Developed directional services for navigation enhancements and integrated the **Speech Synthesis API** for voice-guided directions, further improving user accessibility.
- Presented the pilot project to first responders and implemented 4 changes, updates based on their feedback.
- Mapping was done per county's borders which created grey areas when first responders from one county worked in the other. This was one of the reasons the project evolved to E911 Live phase.

IT Developer - George Mason University, Fairfax, VA   **Jan 2017 - May 2018**

- Designed and developed a fully responsive CS department web portal using **HTML**, **CSS** and JavaScript, integrating a dynamic survey form to enhance user interaction
- Implemented **AJAX** and **JSON** for real time data population, optimizing user experience with asynchronous updates and seamless form completion
- Developed and managed session handling using cookies and Java servlets, ensuring secure and efficient user authentication and state management
- Created an interactive tooltip and tabbed navigation system using jQuery, improving UI/UX with event-driven interactions
- Engineered a scalable, dynamic web application using Java, JSP and AJAX, deployed on Apache Tomcat with **JDBC** for efficient database connectivity
- Led low-level design (LLD) and module development, ensuring maintainable, modular and high-performance codebases
- Actively contributed to all **SDLC** phases using Agile methodology with strong emphasis on Test-Driven Development (**TDD**) to enhance software quality and maintainability

Education

Master of Science, Information Systems - George Mason University, Fairfax, VA   **Aug 2016 - May 2018**
Bachelor of Technology, Computer Science - JNTU Kakinada, India   **Aug 2012 - April 2016**