

MOHAN SAI GANESH KANNA

+1(323) 620-7457 ✉ mkanna@usc.edu

[in linkedin.com/in/mohansaiganeshkanna](https://www.linkedin.com/in/mohansaiganeshkanna) github.com/mohansaiganesh kmohansaiganesh.github.io/Portfolio

ABOUT

Software Engineer with **3+ years of experience** building **responsive, high-performance web applications** using **JavaScript, React, and TypeScript**. Skilled in designing **intuitive user interfaces** following **modern UI/UX best practices**, **optimizing frontend performance**, and delivering **scalable microservices**. Experienced in **backend development** with **Node.js** and **Express**, collaborating across teams to ensure **high-quality, user-centric applications** that **enhance customer engagement** and **accelerate development and deployment cycles**.

SKILLS

Languages & Core Web Technologies:	HTML5, CSS3, JavaScript (ES6+), TypeScript, Kotlin, Java, C++, Python
Frontend Frameworks & UI Libraries:	React, Redux, AngularJS, Vue.js, React Native, Next.js, Tailwind CSS, Material-UI
Backend & APIs:	Node.js, Express.js, REST APIs, FastAPI, MongoDB, PostgreSQL, MySQL, AWS
Testing, Tooling & Workflow:	Jest, React Testing Library, Selenium, Git, Jenkins, GitHub Actions, Docker, Kubernetes

EXPERIENCE

Research Assistant | USC Viterbi School of Engineering Los Angeles, CA, USA
Henry Salvatori Computer Science Center (*React, JavaScript, Nodejs, Express.js, MongoDB, RAG, LLMs, NLP*) **August 2025 – Present**

- Develop **Agentic AI frameworks** integrated with interactive web interfaces using **React, JavaScript, and TypeScript**, enabling users to **visualize reasoning outcomes**, interact with dynamic dashboards, and improve task automation efficiency across research prototypes.
- Design and test multi-agent architectures for **information extraction, ranking, and adaptive planning**, connecting AI reasoning outputs to web frontends and enhancing coordination accuracy, interface responsiveness, and user experience for complex workflows.

Software Engineer - 1 | Samsung (Harman International) Bengaluru, KA, India
SysInfra Team (*JavaScript, TypeScript, Go, gRPC, Rust, Java, C, C++, Multi-Threading, Design Patterns, SoC*) **March 2023 – June 2023**

- Directed CI/CD pipeline integration across **6 cross-functional teams**, ensuring smooth, streamlined deployments using **Agile workflows**.
- Implemented **4 Remote Procedure Calls** using **client-server architecture** and event-driven programming, ensuring high-performance.
- Enhanced **cross-platform** UI communication by replacing HIDL with Stable AIDL modules, cutting down development time by 40%.

Associate Software Engineer | Samsung (Harman International) Bengaluru, KA, India
DCIF Team (*Android UI Framework, Material Design principles, Jenkins, GitHub Actions, Linux, Java*) **October 2020 – February 2023**

- Formulated and led **end-to-end** strategic module development, driving all 7 phases of the Software Development Life Cycle (SDLC).
- Performed root cause analysis and **fixed UI and integration defects**, improving stability and minimizing issue resolution time by 50%.
- Automated reporting pipelines using custom scripts, **reducing manual QA time by 300 hours across 6 teams** and accelerating releases.
- Recognized as a **best performer** in 7 Program Increments for consistent delivery, UI improvements, and cross-team collaboration. [🔗](#)

PROJECTS

STOCK TREK (*MongoDB, Express.js, React, Node.js, JavaScript, Google Cloud Platform (GCP), Kotlin*) ([Try it Here](#)) | [🔗](#)

- Developed a **responsive React-based UI** for a **stock trading platform** supporting real-time buy/sell transactions, portfolio tracking, and personalized watchlists, ensuring **seamless user interaction** and achieving **99.9% uptime** across devices.
- Improved **investment decision-making efficiency by 25%** by designing and implementing **interactive charts** (hourly price trends, SMA, OHLC, volume-by-price) and optimizing **data visualization** for clarity and performance.
- Enabled users to make **faster, informed trading choices** by integrating **live stock data, company insights, and top-20 financial news feeds** via external APIs (Finnhub, Polygon.io), **reducing research and analysis time by 50%**.
- Crafted a **mobile app** using **Kotlin** with **drag-and-drop, swipe-to-delete, and news sharing**, enhancing **user experience by 35%**.

X-CHANGE VIT (*HTML5, CSS3, Bootstrap, JavaScript, jQuery, PHP, SQL*) [🔗](#)

- Built and deployed **responsive web and mobile MVPs** for a **real-time hostel room allocation system** across **24 hostels**, enabling students to **search, filter, and view room availability instantly**, improving **usability by 40%**.
- Designed an **interactive UI components** with filter-based search, image previews, and dynamic content updates using **JavaScript and jQuery**, and streamlined allocation process time from **1 month to 3–5 business days** by integrating **real-time automated workflows**.

EDUCATION

University of Southern California Los Angeles, CA, USA
Master of Science in Computer Science, **GPA - 3.91/4** **August 2023 – May 2025**

Vellore Institute of Technology Vellore, TN, India
Bachelor of Technology in Computer Science and Engineering, **GPA - 3.93/4** **July 2016 – June 2020**

Relevant Coursework: Web Technologies(**Grader - Fall 2024 & Spring 2025**), Algorithms, Data Structures, Database Systems, Computer Networks, Cloud Computing, Distributed Systems, Mobile Application Development, Object-Oriented Programming, Operating Systems.