

Bhargavi Rengarajan

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EXPERIENCE

Mr. Cooper (Rocket Mortgage)

Rejoined Mr. Cooper to lead platform modernization after earning MS in Computer Engineering (2025).

Software Engineer II — Dallas, TX (Remote)

March 2025 – Present

- Engineered a dynamic template using Next.js Incremental Static Regeneration, reducing effort from 1 day to 30 mins.
- Integrated a third party chat, by a non-blocking JavaScript code injection that increased a 25% in user retention.
- Leveraged Microsoft Copilot to automate technical code reviews and expanded the React Testing Library suite, decreasing regression bugs to 25%.
- Orchestrated a Node.js middleware for customer data collection and validation, resulting in seamless lead conversion to 75%.
- Standardized UI patterns via Context API and React component library, reducing design fragmentation across 4 applications

Software Engineer II — Chennai, India

April 2022 – September 2023

- Awarded as “**Challenger - Q4**” recipient for outstanding innovation and problem-solving contributions.
- Spearheaded marketing banner automation for 100+ banners using a JavaScript, [Node.js](#) and Webpack, reducing developing time 96%.
- Migrated 100+ pages from Gatsby to Next.js (SSR/SSG) and lazy loading of images, enhancing Lighthouse scores from 70 to 95+.
- Reduced bundle size by 15% of applications using tree shaking and code splitting for a shared React component library.
- Mentored 5+ Interns and onboarded new hires via KT sessions, teaching agile methodology, codebase architecture and clean practices.

Software Engineer I — Chennai, India

July 2020 – March 2022

- Developed a GraphQL-based sorting/filtering to handle large-scale data, handling 1000+ user request/ sec, loading in 2ms.
- Designed and developed a Single Page application using HTML, React with Redux and UTM tracking web analytics, increasing lead generation by 50%.
- Published a **TypeScript REST** client **NPM** library for 10 endpoints, standardizing request/response handling and reducing duplicated integration code
- Resolved performance bottlenecks on legacy application, leveraging tools like Chrome DevTools and React Profiler.
- Collaborated and Revamped 100+ web pages to meet **WCAG** and WAI-ARIA accessibility standards and increased test coverage across 100+ React components using Jest/Cypress/RTL, reducing regression bugs by 30%.
- Built a Node.js/Express reverse proxy to mirror Nginx on Windows, enabling local development without Docker and supporting hot reload.

PROJECTS

AI Git Commit Tool | Open Source | Node.js, Ollama, Docker, NPM, JavaScript

- Built an on-device GenAI Git subcommand using Node.js and Ollama that leverages an LLM to generate commit messages from code changes, enabling offline use and achieving a 168x smaller footprint with 381 downloads. (NPM package) <https://www.npmjs.com/package/git-commit-at>

US Accident Zone Visualization | React, PySpark, Hadoop, React Maps

- Developed a geospatial accident-zone visualization platform with a React frontend and PySpark processing on Hadoop-backed datasets to identify high-risk hotspots. <https://zpg98r.csb.app/>

Netflix-Inspired Portfolio | Gemini, TypeScript, AWS EC2, Tailwind, GitHub Actions, Firebase SDK

- Architected cinematic UI with Gemini RAG chatbot, improving user engagement 30%. <https://thebhargavi.com/browse>

EDUCATION

MS in Computer Engineering, University of California, Riverside

October 2023 – March 2025

BE in Computer Science and Engineering, Anna University

August 2016 – April 2020

SKILLS

Coding & Languages: CPP, Java, JavaScript, TypeScript, HTML, CSS,

Frontend: ReactJS, NodeJS, [Next.js](#), [Gatsby.js](#), Web vitals, Chrome dev tools, SCSS, Webpack

Testing: Cypress, React Testing Library, Enzyme, Mocha

Cloud: AWS EC2, Azure, GCP Bucket, Kubernetes, Docker, Rancher, Splunk

Certification: Azure Fundamentals, MongoDB for JavaScript Developers, <https://leetcode.com/u/bhargavirengarajan21/>