

Harsh Jobanputra

<https://harshjobanputra.com> | [LinkedIn](#) | [GitHub](#) | harshjobanputra2000@gmail.com | +1 (510) 8949975 | Seattle, WA

Front End Engineer - [Microsoft](#) - Redmond, WA

September 2024 - Present

- **Built the AI-powered Copilot interface** for Power BI using React and TypeScript, enabling users to create dashboards through natural language prompts. Designed smooth, responsive interactions with real-time streaming responses and intelligent loading states that reduced perceived wait times.
- **Led development of table/matrix visual enhancements** in Angular, delivering Excel-like totals and subtotals functionality. Optimized rendering performance to handle 10,000+ row datasets while maintaining smooth 60fps scrolling and full keyboard/screen reader accessibility (WCAG 2.1 compliant).
- **Modernized the formula bar editor** by building custom extensions for the Monaco code editor (same engine as VS Code). Implemented Excel-style "click-to-insert" field references, syntax highlighting, auto-complete suggestions, and keyboard shortcuts—significantly improving the authoring experience for analysts.
- **Developed high-performance data visualization features** using D3.js charting library with Canvas rendering, enabling smooth interactions on charts with 100,000+ data points through intelligent batching, caching, and incremental redraw strategies.
- **Architected complex real-time UI interactions** using reactive programming patterns (RxJS), managing synchronized selection, hover, and editing states across multiple visual components. Applied performance optimizations to keep large dashboards responsive under heavy user interaction.

Front End Engineer - [Quadric.io](#), San Francisco, California

July 2023 – June 2024

- Built a SaaS chip simulation platform in **React.js + TypeScript**, delivering desktop-class performance on web.
- Developed **canvas-based graph editor** and real-time dashboards for large-scale chip performance visualization.
- Created a scalable React **component library** with Storybook, Cypress tests, and Markdown-based content rendering.
- Optimized CI/CD pipelines with GitHub Actions & Webpack, reducing deployment times and ensuring reliability.
- Partnered with Design, Product, and Engineering to ship user-centric UI features adopted by semiconductor engineers.
- **Tech Stack:** React.js, TypeScript, HTML5 Canvas, Chart.js, Cypress, Storybook, GitHub CI/CD pipeline

Full Stack Engineering Intern - [Rivian Automotive, LLC](#), Palo Alto, California

May 2022 – August 2022

- Architected and developed an **EV charger simulation platform** (SaaS) to validate DC fast chargers and fleet chargers at scale, improving testing throughput and reducing dependency on physical hardware.
- Engineered a Node.js-based simulation engine with orchestration services for parallel charger instances, leveraging **gRPC**, **RxJS**, and **proto3** to enable high-volume automated test execution.
- Designed a self-service CLI and dashboard (**React + Jest**) for engineers to configure, launch, and monitor simulations, cutting charger QA cycles by **90%** and accelerating feature rollouts.
- Optimized cloud deployment pipelines by integrating simulation workloads with AWS (EC2, S3, DynamoDB), improving system reliability and **reducing infrastructure overhead**.
- Collaborated cross-functionally with QA engineers, senior architects, and the Director of Engineering to align on long-term EV infrastructure testing strategy, ensuring platform scalability for future charger models.
- **Tech Stack:** Node.js, React, Jest, RxJS, gRPC, proto3, AWS S3, EC2, OCPP, DynamoDB, Confluence, Jira.

Software Engineering Intern - [Thomson Reuters](#), Remote

November 2020 – June 2021

- Developed **NLP model** for classification of human-readable text into machine logic.
- Delivered a testing software for creating dynamic test cases which increased code coverage from **10% to 85-90%**.
- Created Django REST API to auto-generate reports for testing Thomson Reuter's flagship product named Onvio.
- Setup full CI/CD pipelines.

TECHNICAL SKILLS

TypeScript, JavaScript, Angular, React, Next.js, RxJS, D3.js, HTML/CSS, Canvas API, Node.js, REST/gRPC, DynamoDB, MongoDB, AWS, Docker, Git

EDUCATION

• Master of Science, Computer Science

California State University, East Bay, Hayward, CA

Coursework: Advanced Algorithms, Web Systems, Cybersecurity, Operating Systems Design, Theory of Computation.

• Bachelor of Technology – Computer Engineering

Charotar University of

Science and Technology, India

PERSONAL PROJECTS (You can find more projects here - <https://harshjobanputra.com>)

- Pathfinder Visualizer - <https://pathfinding-visualizer.harshjobanputra.com/>