

# Harsh Priye

Software Developer

## Work Experience

### Tata Consultancy Services (TCS)

1 year 6 months

(Jul 2024 – Present)

- Software Engineer

- Developed entire frontend of a Forex payments app, enhancing its UX and performance in a 5-member team.
- Developed an internal tool to parse and compare COBOL strings, reducing debugging time by 80%.
- Optimized frontend performance by 20% through reducing API calls & preventing unnecessary full-page re-renders
- Implemented memoized recursive functions to efficiently visualize and modify XML data.
- Refactored the entire transaction visualization journey by modularizing rendering logic, eliminating redundant code and reducing codebase size by 10,000 lines.

**Tech Stack:** JavaScript, Lit Framework, Git, Azure, Java, Spring Boot

### AulaCube Technologies

4 months

- Software Development Intern

(Mar 2024 – Jun 2024)

- Built an admin dashboard for student data, improving readability, management, and client satisfaction by 40%.
- Fixed 30+ irresponsive UI issues on the AulaEdge website for small-screen devices.
- Introduced Tailwind CSS to the existing code base for faster and responsive styling.

**Tech Stack:** Typescript, React.js, Ant Design, Chart.js, Git.

## Education

### B.Tech - Computer Science (Mathematics and Computing)

CGPA: 7.63

(2020 – 2024)

Netaji Subhas University of Technology (NSUT), New Delhi

### AISSE (CBSE Class 12)

Score: 87%

Vishwa Bharati Public School, New Delhi

(2019 – 2020)

## Projects

### Codeboxes - Online Code Editor

(Java, SpringBoot, Microservices, IPC, MongoDB, Redis, JWT, Next.js, Tailwind CSS, Docker, Github Actions)

- Developed a full-stack online code editor which supports 6+ major programming languages.
- Create REST CRUD APIs using Spring Boot (maintaining REST Maturity Model Level 2), and Configured Spring Security for JWT based authentication and Authorization.
- Built a code-execution service with Bash & Docker, that communicates with the server via IPC (ProcessBuilder). Removed dependency on any 3rd party API for code execution entirely (Increased code execution limit to infinity).
- Switched to microservice architecture separating User+Auth and Code execution services, improving code execution API availability by 100% compared to monolith.
- Developed frontend with Next.js & Tailwind, integrating Shadcn UI and Aceternity UI, boosting DAU by 20%.
- Implemented CI/CD pipeline using Docker and Github Actions for 5x faster deployments, compared to manual.

**Source:** [github.com/harshpx/Codeboxes](https://github.com/harshpx/Codeboxes) , [github.com/harshpx/codeboxes-server](https://github.com/harshpx/codeboxes-server)

**Web url:** <https://www.codeboxes.in>

### Mini Tic-Tac-Toe - Online multiplayer tic-tac-toe game

(Socket.io, Express.js, Node.js, React.js, Tailwind CSS)

- Structured a bi-directional WebSocket server using Socket.io, to achieve low-latency, real-time communication. (90% faster and less bandwidth usage than constant HTTP polling)
- Designed a robust lobby management and scoring system (Only 2 person per lobby, with rematch options).
- Also implemented in-game chat using parallel socket connection between both players. Helped gain users by 40%.

**Source:** [github.com/harshpx/tic-tac-toe-socket](https://github.com/harshpx/tic-tac-toe-socket)    **Web url:** [mini-tic-tac-toe.vercel.app](https://mini-tic-tac-toe.vercel.app)

### Dog Breed Identifier

(AI, Machine Learning, Python, Tensorflow, Java, Spring-Boot, TypeScript, Svelte, Sveltekit, Tailwind)

- Built a CNN image classifier achieving 95%+ accuracy in classifying dog breeds using Python and TensorFlow.
- Served the trained model in a Spring-Boot server to use it as an API.
- Migrated from React.js to Svelte for frontend, gaining approx 60% faster load times and 90% smaller bundle size.

**Source:** [github.com/harshpx/dbi-client](https://github.com/harshpx/dbi-client) , [github.com/harshpx/dbi-server](https://github.com/harshpx/dbi-server)

**Web url:** [dog-breed-identifier-client.vercel.app](https://dog-breed-identifier-client.vercel.app)

## Technical Skills / Tech Stack

**Languages:** Java, JavaScript, Typescript, Bash, SQL, YAML, HTML, CSS

**Frameworks, Libraries & tools:** Spring-Boot, Node.js, Express.js, Redis, STOMP, Socket.io, Kafka, MongoDB, MySQL, PostgreSQL, Docker, Nginx, Github actions, Git, Linux, React.js, Next.js, Svelte, Sveltekit, React-Native, Tailwind.

**Soft skills:** Problem-Solving, Attention to detail, Collaboration, Communication, Adaptability, Ownership, Time management, Continuous learning.