

## Experience

### **Freelance Developer**

April 2024 – Present

#### **E-COMMERCE AUTOMATION TOOL** [\[case study\]](#)

July 2025 – December 2025

- Designed internal desktop automation for seller dashboard listing and order workflows, reducing execution time from ~26 minutes to ~4 minutes per product.
- Replaced DOM scripting with system-level mouse/keyboard orchestration using browser metadata mapping to bypass behavioral and fingerprint-based bot detection.
- Implemented OpenCV-driven fallback UI detection enabling workflow continuity when dashboard layouts changed.

#### **LAW FIRM DOCUMENT PROCESSING** [\[case study\]](#)

February 2025 – June 2025

- Improved legal document retrieval accuracy by implementing hierarchical indexing preserving clause relationships.
- Enabled ingestion of scanned legal records by integrating OCR pipelines and document structure.
- Implemented compliance comparison workflows detecting deviations from firm-standard templates.

#### **SCHOOL EDUCATION PLATFORM** [\[case study\]](#)

October 2024 – January 2025

- Introduced video lecture streaming by implementing HLS delivery with payment integration, backend authorization logic, and schema updates for paid content access.
- Designed video processing pipeline integrating AWS MediaConvert ABR outputs reducing raw lecture videos (4 – 10GB) into adaptive streaming formats (1.5 – 4GB).
- Delivered secure payment integration with server-side verification and failure-handling logic.

#### **HEADWAY.AI** [\[case study\]](#)

March 2024 – August 2024

- Extended production interview workflows by implementing UI and state-driven logic while maintaining legacy compatibility.
- Improved reliability of multi-step candidate evaluation flows by resolving Redux and async state heavy transition issues.

#### **NAROLA & RAJGIR GEMS** [\[case study\]](#)

March 2024 – June 2024

- Implemented complex diamond inventory search by translating 40+ domain-specific grading filters into structured API query construction.
- Resolved payload mapping and filter interaction issues causing inconsistent trading search results.

#### **ADIS TECHNOLOGIES**

Surat, Gujarat

##### **Software Engineering Intern**

December 2023 – February 2024

- Improved application reliability by debugging complex state-management flows across React and React Native projects.
- Delivered incremental improvements inside large active codebases while maintaining system stability.

## Projects

### **THE GOOGLE FILE SYSTEM** [\[case study\]](#)

- Reimplemented 90% of The Google File System research paper from 2003 in Go, using a master–chunkserver–client architecture. Core features include chunk replication, streaming reads, and metadata managed via in-memory B-Trees with log-based recovery.
- Used FUSE to expose a POSIX-like interface on the client, enabling standard file operations. Designed to handle multi-GB files mid-file mutation, supporting workloads like collaborative and redundant workflows.

## Education

### **BHAGWAN MAHAVIR UNIVERSITY**

Surat, Gujarat

B.Tech, Computer Engineering, CGPA 7.6

## Skills & Interests

**Programming Languages:** Typescript, Python, GoLang, C.

**Technologies:** Nextjs, React, Node, Electron, FastAPI, React Native, Redux, Express, NestJs, MongoDB, Prisma, PostgreSQL, LangChain, Redis, AWS.

**Concepts:** Object Oriented Programming, Functional Programming, MVC, REST API.

**Language:** English, Gujarati, Hindi.

**Interests:** Reading Books: Psychology, Fiction, Personal Development.