Ayush Tripathi

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Summary — FullStack Engineer — 2+ Years of Experience

Modernized a multi-million-dollar product (live.browserstack.com) with **zero-downtime migrations**. **Built a 10L+ revenue-generating e-commerce platform from scratch** (outdoorgoats.com). **Reduced latency by optimizing complex frontend algorithms** for MSCI's enterprise platform.

Experience

Software Engineer May 2026 – Present

BNP Paribas | React, Angular, Java, Python, Jest, Azure Pipelines *Mumbai, Maharashtra*

- Established the frontend foundation by developing a reusable **npm-based UI component library** with **Storybook**, enabling consistent design and accelerating feature development across teams.
- Designed and implemented a **Micro-Frontend architecture** for orchestrating multiple applications, improving modularity, independent deployments, and team scalability.
- Built and optimized the end-to-end integration of **LLM services**, connecting AI models with backend APIs and frontend applications to deliver scalable, low-latency AI-powered features.

Software Engineer | **live.browserstack.com** July 2025 – May 2026

BrowserStack | React, Jest, Ruby on Rails, Jenkins *Mumbai, Maharashtra*

- Architected an AI-driven frontend modernization framework using autonomous agents, dependency analysis, and validation pipelines to accelerate migration to React 18, Tailwind CSS v4, and Material UI v5.
- Built agentic workflows for component discovery, migration planning, code transformation, automated test migration, and validation by integrating custom AI agents with MCP (Model Context Protocol) servers and design tooling.
- Designed dependency analysis pipelines mapping 285+ import relationships to enable safe migration sequencing, impact analysis, and reusable migration strategies.
- Developed an event-driven observability framework with custom React hooks to monitor production adoption, detect regressions, and drive data-backed legacy code cleanup.
- Resolved critical modernization blockers including Webpack/Nginx Hot Module Reloading, 388+ Tailwind/PostCSS integration errors, and monorepo pre-commit pipeline failures.
- Delivered 20+ production component migrations with zero downtime while upgrading React 16→18, Material UI v4→v5, and migrating 400+ Enzyme tests to React Testing Library.
- Improved WCAG accessibility through keyboard navigation, focus management, semantic components, and screen reader support.
- Won 1st place in an internal AI Hackathon by building an AI-powered customer assistant that automated onboarding workflows across the product suite.

Technology Analyst | **Internship** | **qc.msci.com** Jan 2025 – June 2025

Morgan Stanley Capital International | React, Jest, Azure Pipelines *Mumbai, Maharashtra*

- Contributed to fine-tuning Large Language Models (LLMs) and evaluating model performance for research and domain-specific use cases.
- Deployed open-weight LLMs on Azure Virtual Machines and supported rapid prototyping for AI research and development initiatives.
- Built proof-of-concept applications leveraging LLMs to validate business requirements, research hypotheses, and real-world AI use cases.

Frontend Developer | **outdoorgoats.com** April 2022 – June 2023

OutdoorGoats | JavaScript, React Native, AWS *Mumbai, Maharashtra*

- Built and shipped e-commerce features using React, React Native, TypeScript, GraphQL, and Redux Toolkit.
- Architected and developed an advertising module using GraphQL, Firebase, and event-driven analytics, enabling personalized ad delivery.
- Optimized the feed using ranking algorithms, lazy loading, caching, list virtualization, and React Query, improving responsiveness and user engagement.
- Developed media optimization and video compression pipelines using FFmpeg, reducing storage costs, bandwidth usage, and content delivery latency.
- Improved home screen performance through rendering and data-loading optimizations.
- Managed Android and iOS application releases on the Google Play Store and Apple App Store.

Personal Open Sourced Projects

Data Ingestion Pipeline | *Python, Zerodha API, Parquet, DuckDB* | GitHub — Feb 2024 – Present

- Developed a Python-based pipeline to scrape historical stock market data directly from Zerodha's web network endpoints, bypassing formal APIs using reverse-engineering of request patterns.
- Parsed and structured the scraped data into Parquet format, enabling fast columnar access, long-term archival, and efficient analytics.
- Integrated with the FinWizard Analytics backtesting system, allowing rapid testing of custom strategies using technical indicators like MACD, RSI, ATR, etc.
- Leveraged DuckDB to run SQL queries over Parquet files for efficient data slicing, filtering, and indicator calculations.

FinWizard Analytics | *React, Python* | GitHub | Live Demo — Dec 2023 – Present

- Developing a system to calculate and analyze technical indicators (e.g., RSI, MACD, ATR) using historical stock data, enabling data-driven trading decisions.
- Designed and implemented an React-based dashboard to visualize statistical insights, technical indicators, and trading recommendations for enhanced user experience.
- Built volatility analysis tools using Average True Range (ATR) to calculate dynamic stop-loss and target price levels, improving risk management strategies.
- Integrated Flask backend with Python libraries (Pandas, NumPy) for efficient data processing and analysis, ensuring scalable and accurate financial computations.

FinGPT | *React, Flask, Open AI LLM APIs* | GitHub — Oct 2023 – Dec 2023

- Scraped the list of available stocks on NSE, created the ticker name and based on that system will scrape all the stock related data from Internet mostly from yFinance platform
- Cleaned and restructured the data to obtain best output from LLM
- Prompted LLM to get insights from balance sheet, financials, netincome and ESG (based on sector, competition and management)
- Dumped all the response in format of Insights, Pros, Cons and suggestion, worked really well with O1 mini model

CERTIFICATES / ACHIEVEMENTS

SPIT Tech team - Worked as tech head to build cse.spit.ac.in
ACSES Tech team - Led the development of acses.spit.ac.in
Mumbai University: Build a tool to allocate marks to dyslexia students based on their pass/fail status
Data Structure and Algorithm: Solved 360+ questions, working on to improve CP capabilities
Freelancing: Served more than 10 clients in the Indian startup ecosystem since 2021, delivering impactful solutions across various sectors.

Education

Sardar Patel Institute of Technology, Mumbai — CGPA - 8.66
Master of Computer Applications — *August 2023 – June 2025*

Technical Skills

Languages: Python, JavaScript, SQL
Frameworks:Next JS, Flask, Django, Node.js, React Native
Libraries: React JS, Matplotlib, NumPy, OpenCV
Others: HTML, CSS, Data Structure and Algorithms, Database Management System, Distributed Systems, AWS, Git