Harsh Tiwari

https://tiwariaiharsh.com linkedin.com/in/tiwari-ai-harsh

EXPERIENCE

• Kusho

Senior Full Stack Developer

Bengaluru, India
Nov 2023 - Present

- AI-Powered E2E Testing Platform: Developed LLM-based testing platform generating API test chains, executing 15K+ concurrent flows with distributed test orchestration, achieving 10x faster testing efficiency.
- Intelligent Task Processing System: Built distributed system using Redis, RQ, and vector search for intelligent caching, handling 100K+ daily tasks with auto-scaling and 99.9% uptime.
- Automated UI Testing Framework: Engineered Chrome extension with Playwright integration and LLM-powered test generation, achieving 5x test coverage and reducing test creation time by 70%.
- Universal API Testing Framework: Architected multi-protocol testing framework with custom DSL for REST/GraphQL APIs, reducing test authoring time by 75% with 95% coverage across services.

• Castler Delhi, India

Senior Full Stack Developer

July 2021 - August 2023

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- Enterprise Payment Processing Platform: Built high-throughput payment system with Redis and circuit breakers for UPI/IMPS/NEFT, processing 100Cr+ monthly with 99.99% uptime and sub-1% failure rates.
- Financial Security Infrastructure: Implemented bank-grade security using OAuth 2.0/PKCE with automated scanning (OWASP ZAP, SonarQube), achieving PCI DSS compliance.
- No-Code Financial Workflow Platform: Developed React/TypeScript-based workflow builder with XState, enabling drag-and-drop transaction automation that substantially increased user adoption and reduced manual errors.
- Large-Scale Database Migration: Led zero-downtime migration of 500GB+ financial data from MongoDB to MySQL, implementing optimized schemas and caching for 50% faster queries and RBI compliance.
- **High-Scale Batch Payee Validation System**: Architected distributed batch processing pipeline using Redis, Kafka, and parallel worker pools, validating 1M+ payees daily with automated retries and error recovery.

PROJECTS

- Simple Migrator: Developed and published a Python-based SQL migration tool supporting multiple databases with features for version control, rollback mechanisms, and migration status tracking. Includes CLI for migration creation, application, and synchronization. [Link]
- Nvim HTTP Test Manager: Created a Neovim plugin in Lua for managing HTTP API tests, featuring LLM-powered test generation, and result visualization. Supports environment variables and test suite organization with automated test case suggestions. [Link]

TECHNICAL SKILLS

- Programming Languages: : Python, TypeScript, GoLang, Rust, C++, SQL, Java, JavaScript
- Frontend Development: : React, Next.js, TypeScript, Redux, Vue.js, NuxtJS, HTML5, CSS3, Tailwind
- Backend Development: : Node.js, NestJS, Express, Flask, FastAPI, GraphQL
- Databases & Caching: : PostgreSQL, MySQL, MongoDB, Redis, Elasticsearch, Pinecone
- DevOps & Cloud: Docker, Kubernetes, AWS, GCP, CI/CD, GitHub Actions, Jenkins
- AI & Testing: : LangChain, OpenAI, Playwright, Jest, Mocha, Chai, PyTest
- Tools & Practices: : Git, Linux, Nvim, Tmux, TDD, System Design, Microservices

EDUCATION

• Amity University

Bachelor of Technology in Computer Science

Lucknow, India

Aug. 2017 - May 2021