HARSHAL LAHERI

www.harshallaheri.me · Linkedin · harshal@harshallaheri.me

EXPERIENCE

Reknowledge Inc   Kitchener, Ontario
Full Stack Developer   October 2023 - February 2025

- Cloud-Native Microservices: Designed and deployed containerized applications on OpenShift (Red Hat Kubernetes), leveraging Docker to reduce deployment time by 60% and enhance scalability for enterprise-level workloads
- Real-Time Observability: Integrated Grafana and OpenTelemetry for end-to-end system monitoring, enabling data-driven performance optimizations and reducing incident resolution time by 40%
- Agile Collaboration: Achieved a 98% on-time delivery rate by leading sprint planning and daily standups, fostering alignment between developers, QA, and product managers in Scrum workflows
- UI/UX Optimization: Boosted cross-device usability by 30% using React, TypeScript, and Redux, implementing a reusable component library to accelerate frontend development

RecruitingMonk   Bengaluru, India
Python Developer   December 2022 - May 2023

- High-Performance Microservices: Developed a WebSocket-based Python/Flask service to reduce database access latency by 30%, improving real-time candidate search functionality for 10k+ monthly users
- CI/CD Automation: Streamlined testing and deployment pipelines with GitHub Actions and Selenium, cutting manual effort by 50% and ensuring 99% test coverage for critical APIs
- Scalable RESTful APIs: Built Flask-based APIs to handle 5k+ concurrent requests, enabling seamless integration between frontend dashboards and PostgreSQL/MongoDB backends
- AI-Driven Search: Enhanced candidate matching accuracy by 25% by integrating machine learning algorithms into search filters, reducing recruiter workload by 15 hours/week

iLu Space   Helsinki, Finland
Backend Developer   May 2022 - August 2022

- Carbon Tracking API: Architected a FastAPI-powered RESTful service for real-time carbon emission analysis, deployed on Heroku with automated CI/CD, supporting 50k+ monthly data transactions
- Database Optimization: Improved PostgreSQL query speeds by 35% through indexing and partitioning, enabling sub-second response times for large-scale emission datasets
- Cloud Security: Implemented RBAC and encryption for API endpoints on AWS, achieving SOC-2 compliance and reducing vulnerabilities by 60%
- Testing Automation: Reduced deployment time by 40% using GitHub Actions to automate unit/integration testing, ensuring zero critical bugs in production releases

SKILLS

Languages:	Python, JavaScript, Go, TypeScript, SQL
Backend:	FastAPI, Django, Flask, Litestar, Node.js, Express, REST, GraphQL, Celery, Fastify
Frontend:	React, Next.js, HTML, CSS, Tailwind CSS, Bootstrap, Material UI, Chakra UI, Shadcn UI
Cloud & DevOps:	AWS, Google Cloud, OpenShift (Red Hat Kubernetes), Heroku, Docker, Kubernetes, Firebase, GitHub Actions, Azure DevOps, Nginx, Supabase, Vercel, Cloudflare
Databases:	PostgreSQL, MySQL, MongoDB, Redis, DynamoDB, SQLAlchemy, Alembic
AI/ML:	OpenCV, NumPy, Pandas, Vertex AI
Testing:	Mypy, Playwright, Pytest, Cypress, Jest
Tools :	Git, GitHub, Postman, Grafana, OpenTelemetry, Pre-commit, Husky, ffmpeg, Selenium

EDUCATION

Conestoga College   Ontario, Canada
Postgraduate certificate in Web Development   2023 - 2024

Parul University   Gujarat, India
Bachelor of Technology in Information Technology   2019 - 2023

PROJECTS

Mystiko: Secure AI Integration for Sensitive Domains — Dec 2024
Python, Typescript, Litestar, NextJS, PostgreSQL, Vector DB

- Engineered a Retrieval Augmented Generation (RAG) solution using Python, Litestar, and Vector DB, eliminating the need for costly AI model retraining and reducing domain-specific deployment time by 50% for healthcare and education sectors.
- Secured sensitive data with AES-512 encryption and isolated containerization (Docker), achieving zero data leakage while maintaining sub-second query performance via PostgreSQL and Vector DB optimizations.
- Built a modular full-stack platform (NextJS frontend, Litestar backend) to integrate third-party AI models like GPT-4, Llama and Gemini improving response accuracy by 40% and enabling seamless scalability across 10+ organizational use cases.

Cloud-Based Timetable Management System (Website Link) — Fab 2023
Python, Django, Jinja2, PostgreSQL, Supabase

- Developed a scalable scheduling platform for educational institutions using Django and PostgreSQL, reducing manual scheduling errors by 40% through automated timetable generation and teacher-subject assignments.
- Integrated Supabase for real-time database synchronization and secure cloud hosting, achieving 99.9% uptime for 1k+ daily users
- Implemented a responsive UI with Jinja2 templates and Bootstrap, streamlining administrative workflows and improving user adoption by 25%

AI-Powered Vehicle Detection System (GitHub Repo) — Mar 2022
Python, OpenCV, Flask, Jinja2, Machine Learning, NumPy, Pandas

- Designed a real-time vehicle detection model using OpenCV and ML, achieving 92% accuracy in processing live video streams at 50+ FPS
- Integrated the model into a Flask-based web interface with automated data preprocessing (NumPy/Pandas), reducing false positives by 30%
- Deployed the system on AWS EC2 with Docker, enabling seamless scalability for traffic monitoring applications used by municipal authorities

OTHER

Open-Source Contributor & Community Moderator — Litestar
Led technical contributions to Litestar, an open-source Python framework, enhancing API documentation and middleware features over 2 years. Moderated a 1,800+ member community, driving engagement through code reviews, roadmap discussions, and onboarding workshops that boosted enterprise adoption by 35%. Advocated for best practices in backend development, fostering a culture of collaboration and innovation.

Volunteer — GDG Waterloo
Co-organized Google DevFest 2023 (500+ attendees), curating sessions on AI and cloud-native tools. Collaborated with 15+ global speakers and volunteers to deliver hands-on labs, resulting in 3 local tech partnerships and a 40% surge in community engagement post-event.

Technical Workshop Lead — GDG Conestoga
Designed and led a backend development workshop for 100+ participants, teaching real-world app building with FastAPI, Express, and CI/CD pipelines. Mentored attendees to create 15+ prototype projects, emphasizing testing (Pytest) and Git workflows, aligning with industry standards for scalable, maintainable code.

CERTIFICATIONS

Microsoft Technology Associate — Microsoft
Credential ID: 40496725 (Verify) — Jan 2022

Architecting with Google Compute Engine Specialization — Coursera
Credential ID: VLBRHFGZGSFX (Verify) — Feb 2021

Python for Everybody Specialization — Coursera
Credential ID: WXZ8F3SE7QZ9 (Verify) — Aug 2020