

Harsis Yadav

Senior Full Stack Engineer

Amsterdam, Netherlands | harshishyadav@gmail.com

linkedin.com/in/harsis-yadav-160344128 | github.com/Harshish | Website: harsis.dev | Youtube: @harsisdev

PROFESSIONAL SUMMARY

Senior Full Stack Engineer with 8+ years of experience designing, building and operating production web platforms end to end, from PostgreSQL data models and Python/TypeScript APIs to SvelteKit and React frontends on Azure and AWS. Most recently delivered AI-powered regulatory compliance features (LLM, RAG, LangChain, LangGraph) on a multi-tenant B2B SaaS platform, owning data security, performance and CI/CD. A systems background in C/C++ networking at Arista and HPE Aruba brings strong performance and reliability instincts to full-stack work.

TECHNICAL SKILLS

Languages: Python, TypeScript, JavaScript, SQL, C++, C

Frontend: Svelte, SvelteKit, React, Next.js, Tailwind CSS, shadcn/ui, TanStack Table & Virtual, Storybook, Three.js, React Three Fiber, HTML5, CSS3

Backend: FastAPI, Node.js, Flask, REST APIs, OpenAPI, Microservices, Serverless (Azure Durable Functions), SQLAlchemy (async), Celery, Redis

Databases: PostgreSQL (Row-Level Security, pgvector, Apache AGE), PgBouncer, MongoDB, Alembic, dbmate, Sequelize

AI / LLM: LangChain, LangGraph, OpenAI API, RAG, Embeddings, Vector Search, Agentic Workflows, LLM Evaluation (DeepEval), BERT

Cloud & DevOps: Azure (Functions, Storage, App Configuration, Communication Services, Monitor), AWS (ECS, EC2, S3, IAM), Docker, Docker Compose, Dapr, GitHub Actions, GitLab CI/CD, Traefik

Observability: OpenTelemetry, Prometheus, Grafana, Azure Application Insights

Security & Auth: OAuth 2.0, OpenID Connect, Auth0, Keycloak, RBAC, Multi-Tenancy, PII Redaction

Testing & Quality: pytest, Vitest, Playwright (E2E), Testing Library, Ruff, ESLint, Prettier, pre-commit, Code Review, Feature Flags, AI-Assisted Development (Claude Code, Cursor)

PROFESSIONAL EXPERIENCE

Senior Full Stack Engineer JAN 2026 – PRESENT

ACE RegTech (RegAI), Amsterdam, Netherlands

- Led end-to-end delivery of **Impact Assessment v2**, the AI-powered regulatory adherence module of a multi-tenant compliance SaaS platform: new FastAPI read model and REST endpoints, SvelteKit UI (requirement matrix, policy reader, live progress tracking), rolled out behind feature flags and replacing the legacy v1 stack while preserving existing deep links.
- Hardened multi-tenant data isolation in **PostgreSQL**: routed every tenancy check through **row-level security (RLS)** helpers, scoped tenant context per transaction, made tenancy constraints fail closed, and built a parent/subsidiary organization hierarchy with RLS-enforced cross-org access.
- Cut database and API latency: reduced a requirements query over **6.6M rows from 387 ms to 7 ms (55x faster)**, collapsed per-request access checks from 8 serial SQL statements to 1, parallelized independent reads with asyncio, and introduced **PgBouncer** and async SQLAlchemy connection pooling with fail-closed tenant reset.
- Built serverless data pipelines on **Azure Durable Functions** for regulatory content and customer glossary imports (Excel parsing, embedding generation, single-run orchestration, status polling), plus an admin UI to trigger and monitor runs.
- Developed **LLM / RAG** features with LangChain, LangGraph and OpenAI: term extraction from regulations and policies, multi-source context retrieval with provenance tracking, and an agentic-search simulation mode; removed customer text from logs to protect data privacy.
- Implemented fine-grained **RBAC with Auth0** (permission-gated feature areas, per-organization role allowlists synced with Auth0, server-side route guards) and an email notification service with daily/weekly digests, audit logging and PII redaction.

- Improved SvelteKit/TypeScript frontend performance with list virtualization (TanStack Virtual), cached paged loading (**2.5x fewer round trips**) and a fix for a runaway refetch loop generating ~230 failed requests/s per browser tab.
- Raised engineering quality across **450+ commits**: GitHub Actions checks for migration up/down round-trips, 40+ database migrations, 150+ new test files (pytest, Vitest, Playwright E2E), Ruff and pre-commit hooks, and a Claude Code skills library codifying backend conventions for AI-assisted development.

Lead Full Stack Developer MAR 2024 – DEC 2025

Forward Football, Amsterdam, Netherlands

- Partnered with data scientists to design and deploy a modular **ML pipeline** (FastAPI, Celery, AWS S3), cutting runtime by **600+ seconds** through in-memory caching and result reuse.
- Architected scalable **multi-tenant PostgreSQL** schemas supporting dynamic team structures and RBAC permissions for secure data access.
- Built high-performance REST APIs in **Node.js** (Sequelize) and **FastAPI** (SQLAlchemy, Alembic) with **OAuth 2.0 / Keycloak** for secure data ingestion and service-to-service authentication.
- Owned the DevOps lifecycle: Dockerized services, designed **GitLab CI/CD** pipelines for automated testing and rolling deployments to **AWS ECS**, and managed multi-environment AWS infrastructure (EC2, S3, IAM, Traefik).
- Built an ML-driven admin dashboard in **React, TypeScript, Tailwind CSS and shadcn/ui** with 30+ interactive charts and filters, integrated with Keycloak SSO and role-based routing.

Software Engineer SEP 2021 – JAN 2024

Arista Networks, Bangalore, India

- Engineered QoS features (CoPP, sFlow, traffic shaping) in **C++** on Arista EOS for high-performance data center switches, in compliance with relevant RFCs.
- Delivered end-to-end implementation of sFlow packet sampling for network monitoring on new Broadcom-based platforms.
- Developed CLI handlers and protocol logic in C++ and **Python** on Linux, and built Python test automation suites covering feature, breadth and stress scenarios.

Software Engineer II JUL 2018 – SEP 2021

Aruba Networks (Hewlett Packard Enterprise), Bangalore, India

- Implemented network protocols (RADSEC, ZTP, DHCP Snooping) in **C** on Aruba AOS-CX and HPE PVOS switch platforms.
- Resolved a critical DHCP packet-parsing defect, cutting switch auto-onboarding time by **120 seconds**.
- Built Python automation for validation and regression testing, increasing test coverage and reducing manual QA effort.
- Won a company-wide **Innovation Award** for a proof-of-concept WhatsApp chatbot for remote switch management.

PROJECTS

- **Stocktrix** (stocktrix.online): Real-time stock news sentiment analysis using a BERT model. FastAPI, Next.js (SSR), Tailwind CSS, Docker.
- **3D Portfolio** (harshish.github.io/portfolio): Interactive 3D portfolio built with Next.js, TypeScript, Three.js, React Three Fiber and WebGL.
- **Football Manager** (github.com/Harshish/football-manager): Dashboard to analyze and visualize football player statistics. Python, Flask, React.
- **Open-source contributor**: [shadcn/ui](https://github.com/shadcn/ui), [coala](https://github.com/coala)

EDUCATION

Bachelor of Engineering, Computer Science 2018

Manipal Institute of Technology, India