

YVES TOUPE

Senior / Lead Software Engineer | Full-Stack • Distributed Systems • AI Integration

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SUMMARY

Senior full-stack software engineer with 10+ years building, operating and leading production systems — web, mobile, APIs, data pipelines and cloud infrastructure. At Smart Tubing I lead the squad behind a real-time platform for 1M+ connected medical devices: Python/TypeScript APIs, React and mobile apps, MQTT and Kafka/RabbitMQ messaging, Databricks/Spark pipelines, LLM integration, and Kubernetes/Terraform infrastructure on AWS, GCP and Azure. Earlier I built banking software for Crédit Agricole, BTG Pactual and Banco ABC, e-commerce for Nike and Unilever within a 40-engineer team at I9XP, and led a 6-person team at MAZZA FC. Through my studio, Technology Harvest, I ship complete products end to end — web, native iOS/Android, AI — as sole engineer. Core stack: TypeScript/JavaScript, Python, Node.js, React, Angular, Go, PHP, SQL/NoSQL, Kubernetes, Terraform.

SKILLS

Languages: TypeScript/JavaScript, Python, Go, PHP, C#, SQL

Frontend & mobile: React, Next.js, Angular, TypeScript, RxJS, NgRx/Redux, HTML, CSS/SCSS, Tailwind, Web Accessibility (WCAG); native iOS/Android releases, Unity 6 (C#), AdMob, Firebase, Android Auto/CarPlay, Flutter

Backend: Python, TypeScript, Node.js/Express, Go, PHP, C#, RESTful APIs, OpenAPI, microservices, message queues (Kafka, RabbitMQ), MQTT, Socket.IO/WebSockets

Data & AI: PostgreSQL, MySQL, MongoDB, SQL/NoSQL, Databricks/Apache Spark, Python/Pandas; LLM API integration (OpenAI, Anthropic/Claude SDK), RAG & vector databases, prompt engineering, MLOps (MLflow, Vertex AI), Databricks/Apache Spark, Python/Pandas

Cloud & DevOps: AWS (S3), Azure, Google Cloud, Kubernetes, Docker, Terraform/CloudFormation, CI/CD (Jenkins, GitHub Actions), nginx, PM2, Git

Leadership & practices: AI-assisted development (Claude Code), TDD, Jest/Cypress/Mocha, Agile (Scrum, Kanban), code review, OKRs, mentoring, client-facing scoping

EXPERIENCE

Senior Software Engineer | [Smart Tubing](#) | Palo Alto, CA | Sept 2023 – Present

- Lead an engineering squad on a real-time platform managing 1M+ connected medical devices: set OKRs, define technical scope with non-technical stakeholders, run design and code reviews, mentor engineers and own production outcomes.
- Hands-on across the stack: Python/TypeScript APIs, React web applications, a companion mobile app, the MQTT device-messaging layer and the Kubernetes/Terraform/CI-CD infrastructure.
- Designed a predictive data-caching algorithm in Python that improved data-retrieval efficiency by 25% and lowered latency platform-wide.
- Integrated LLM APIs and ML models into the platform's data services; Databricks/Spark pipelines for device-data reporting.

Founder & Lead Engineer | [Technology Harvest](#) LLC (software studio) | SF Bay Area | 2022 – Present

- Founded a software studio and ship as lead engineer: architecture, code, cloud, CI/CD, store releases and operations across web, native mobile and games — zero-to-one, with direct customer feedback.
- Products: [Barkpark](#) (React web + native iOS/Android, Node.js/Express/MongoDB, Socket.IO, MQTT, S3, Firebase, OpenAI moderation), a CRM / sales-automation platform (Angular 18, Express, MongoDB, Stripe, node-cron), [TH AI](#) (Anthropic SDK backend), [Lyratik](#) (App Store + Google Play) and six Unity 6 (C#) games on Google Play.

Senior Software Engineer | [Aubay](#) (Crédit Agricole) | Portugal & France | Nov 2022 – Sept 2023

- Maintained and debugged PHP banking applications for Crédit Agricole; cut critical bugs 80% and raised system uptime.

Front-End Developer | [Singia](#) (BTG Pactual, Banco ABC) | São Paulo, Brazil | *Apr 2020 – Feb 2022*

- Enhanced banking platforms with React and Angular front ends, increasing user engagement.

Senior Software Engineer | [I9XP](#) (Nike, Unilever) | São Paulo, Brazil | *Apr – Dec 2019*

- Within a 40-engineer team built B2B/B2C e-commerce platforms for Nike and Unilever; online sales +20% with improved cross-platform UX.

Senior Programmer & Team Lead | [MAZZA FC](#) | Franca, Brazil | *May – Dec 2018*

- Led a 6-person team delivering a modular React/Node.js e-commerce platform serving 2–5K users/day; set up CI.

Software Developer | [Accenture](#) (DNIT — Brazil's National Dept. of Transport Infrastructure) | Brasília, Brazil | *Sep 2016 – May 2018*

- Built mission-critical PHP/SQL web apps with Angular UIs and Keycloak auth; led the development phase of SUPRA (Scrum, team of 8) — real-time road-construction data, dashboards and maps that doubled efficiency in managing national infrastructure projects.

PHP Developer | Zipmesh | San Francisco, CA | *Mar – Aug 2016*

- Built and deployed an e-commerce app (Laravel 5.2 API, AngularJS, Ionic mobile) with Stripe payments; checkout conversion +15%.

Software Developer | Myinfoshare | Brasília, Brazil | *Aug 2015 – Mar 2016*

- Led development of a central online-identity platform (CodeIgniter, MongoDB 3 sharding/replica sets, encrypted S3 storage, load balancing, Git-flow, CI); supervised a junior developer; launched with zero critical security incidents.

Systems Analyst | [Zago Engenharia](#) | Brasília, Brazil | *Sep 2014 – Jul 2015*

- Multilingual web apps (Zend Framework) and an e-commerce app for an environmental consulting company.

Earlier roles: AD-infinitum — PHP/Zend developer (2013–14); co-founded a software & training startup in Benin (2009–14); junior developer (2005–08).

EDUCATION

MS, Computer Science — University of Brasília (UnB), Brazil, 2015. Coursework: Advanced Algorithms, Distributed Systems.

BS, Software Engineering — University of Abomey-Calavi, Benin, 2008.

LANGUAGES

English (fluent) • French (fluent) • Portuguese (fluent) • US permanent resident — no sponsorship required