

# Huy Le Resume

☎ (+84) 983-543-444   🌐 huylenq.com   ✉ huy.lenq@gmail.com   🌐 huylenq   📱 huylenq   📍 HCMC, Vietnam

## Summary

Over 14 years, I've worked across the full stack — backend, frontend, infrastructure, data systems — and most recently moved into ML. That breadth built a generalist's instinct: seeing how pieces fit together and knowing where to dig deeper. Generalist doesn't necessarily mean shallow. Here's where I go deep:

- System Architecture** Distributed and data-heavy systems in particular. I design end-to-end: storage choices, message queues, caching strategies, load balancing, API/RPC contracts — and I implement what I design.
- Engineering Leadership** I've led up to 20+ people across six concurrent teams, and built new teams from the ground up when needed. I optimize for ownership and accountability — I'd rather be a consultant than a bottleneck.
- Developer Tooling** I believe in investment for leverage from DX tools. At Treasure Data I built a DSL and mini-IDE that achieved a 20:1 code reduction for data connectors. Recently I've been building **spirit** — a command center for coding agents that I sculpted to fit my workflow.
- AI & Agentic Systems** Currently leading a dental AI research group (tooth segmentation, detection from X-rays). Built an agentic examination system at VUS that replaced human examiners with a multi-modal AI orchestrator. Another agentic app that I'm currently tinkering with is **obsidian-agent**.

Other tools in the belt: Java/JVM (deep but rusty), Python, JavaScript/React, Clojure, K8s, Kafka, PostgreSQL, ClickHouse, Elasticsearch. Emacs user.

## Experiences

### Hexos.ai <sup>↗</sup>

2025 - 2026 (current)

Founder

An indie research group I founded with two AI engineers, collaborating with medical postgraduate researchers. I built hexos.ai as a research platform for dental imaging deep learning. I design the model architectures, training pipelines, and inference systems, then expose them as interactive notebooks where collaborators can run segmentation on real scans without touching code or provisioning GPUs.

Results so far: a dual-branch **segmentation** system (semantic + instance) that labels all 32 individual teeth from 3D scans, and a multi-stage panoramic X-ray analyzer that maps edentulous zones and **derives physical measurements** in millimeters by calibrating against annotated CBCT-panoramic probe pairs.

*Tech stack:* Pytorch, nnUNet, Marimo, MONAI, Python, Railway, Runpod, etc.

### VUS <sup>↗</sup>

2025

Engineering Manager & Architect

VUS is a 30-year-old English school aiming to modernize their edtech products. In three months here, I stood up their engineering operations (mediated cross-team collaboration, trimmed the dogmatic parts of their scrum, etc.).

But the highlight was engineering: I built an agentic app for **Cambridge YLE** examinations. Unlike IELTS, which is straightforward to digitalize, YLE requires a live examiner orchestrating **media-rich, interactive tasks**, making it a natural fit for an agentic system. The app operates an **examiner agent** that orchestrates the exam flow through **continuous context**, replicates the back-and-forth of a real candidate-examiner session.

*Tech stack:* Next.js, Vercel AI SDK, etc.

## Cake <sup>↗</sup>

2024 - 2025

Principal Engineer

### Situation

Cake is a neobank. They were building an in-house **customer data platform** for 4 million profiles. The hardest part wasn't scale. It was the intricate web of internal integrations: incentive programs, vouchers, loyalty, notifications, gamification, and marketing campaigns, all on a legacy codebase.

### Contributions

Led a team of **7+ engineers** and **2 product managers**. My role was (despite the title) a dual-hatted manager and architect. More precisely, I defined ownership boundaries, made the key design calls, and delegated execution to the right people for each problem.

The voucher system is a decent example to illustrate how I contributed. For its rule engine, I set the **architectural constraints**: conditions modeled as expressions, hardcoded strategy patterns first for integration flexibility, with a clear path to self-service authoring. I then shepherded implementation with an appointed lead engineer.

Overall, my work shipped across multiple product surfaces: customer segmentation, campaign tooling, notification platform, voucher systems. Less about flagship launches, more about **compounding reliability** and **capability** across a sprawling platform.

*Tech stack:* Golang, K8S, gRPC, Pub/Sub, etc.

## PrimeData <sup>↗</sup>

2021 - 2023

Director of Engineering / Co-founder

### Situation

The company built a CDXP — a data platform for hosting and processing customer profiles. The core challenge: identifying and unifying customer data across **heterogeneous schemas** from dozens of disconnected services and systems.

I joined 18 months in. The culture and startup energy were strong, but the engineering team skewed heavily junior and the system had been built to sell, not to last.

### Key Contribution

*Problem:* The foundation of the platform — data integration — was immature. Connectors were a patchwork of ad hoc scripts and cron jobs. Development took 3–6 months per connector, bug fixes dragged on for weeks, and nothing was built to scale.

*What I did:* Designed and implemented a shared platform layer so connectors weren't built from scratch every time. Handpicked engineers for a new Integration team and established the development process and ownership model.

*Results:* New connectors went from **3–6 months to 2–3 months**. Bug fixes dropped from **weeks to days**. The process went from "everyone asking everyone" to clear ownership and direct accountability.

### Other responsibilities:

**Leadership:** Oversaw 20+ people across six teams (Profiles Backend, API Backend, Integration, DevOps, DataOps, Frontend). My approach: high ownership per team, with me as consultant and occasional tie-breaker — not bottleneck.

**Engineering:** Designed and implemented core components — Integration platform, DataOps toolset, Profiles modeling, system test templates. Wrote extensive documentation and spent comparable effort making sure everyone else did too.

*Tech stack:* Kafka, Airbyte, Unomi, K8S, Python, Java, PostgreSQL, ClickHouse, etc.

## TreasureData <sup>↗</sup>

2018 - 2021

Senior Data Engineer

**Yao Lu** — Senior Director of Engineering, Treasure Data 📍 Mountain View

“ Huy is one of the most talented engineers I have worked with. He brings a rich background in various techniques, solid problem solving skills, and great passion for innovation. Huy also did an excellent job leading delivery of projects, managing the schedule and progress. I have no doubt Huy will be a star employee for any team he works for. ”

### Situation

TreasureData is already a 10-year-old matured data platform at the time I joined. I started by taking over the iOS and Unity SDKs, then transitioned into data connector platform.

### Key Contribution

*Problem:* Every data connector required thousands of lines of boilerplate Java. Writing and maintaining them was a well-known pain across the team.

*What I did:* Built a "Connector Builder" — a DSL and mini-IDE for authoring connectors — in half a year.

*Results:* **20:1 code reduction** — a 2,000-line Java connector became ~100 lines in the DSL. VPs pushed for company-wide adoption. Integration and sales teams were trained to write PoCs with the tool, proving data sources were connectable on the spot.

### Other responsibilities:

Built a **JVM bytecode analysis** tool for detecting runtime compatibility issues, developed mobile SDKs and several new data connectors, and traveled to Mountain View and Tokyo for cross-office engineering alignment.

*Key techs:* Java, Clojure, Embulk, iOS, Unity3D. etc.



## Earlier Career

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|---------------------------------------|---|
| <b>EgoPulse</b><br>2016 - 2018        | Healthcare startup. Founding engineer.<br><i>Stack:</i> Java, Rx, VertX, Rancher.   |
| <b>Atlassian</b><br>2016              | HCMC office closed after my first month. This led to EgoPulse — founded by the former Head of Atlassian Vietnam and other ex-Atlassian engineers. |
| <b>Simple Solution</b><br>2014 - 2016 | Built a communication platform that powered SEA Games 2015 in Singapore, coordinating 17,000+ volunteers.<br><i>Stack:</i> Java, VertX.           |
| <b>ItsyBits</b><br>2012 - 2013        | Outsourcing shop. Mobile apps and games.<br><i>Stack:</i> JavaScript, Lua, PhoneGap, Cordova, Sencha.   |

## Education

HCMC IU / Computer Science & Engineering

## Talks

I am an occasional speaker:

- ▶ VTC Academy Talkshow <sup>↗</sup>
- ▶ 2359 Media — “Data Engineering Career”
- ▶ Barcamp — twice, “Interactive Development with Vim” and “Game Development in 30 minutes”