Tom Houlé

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Relevant Professional Experience

Lead Engineer   Oct. 2023 – Present
Grafbase   Remote

- Small, high ownership and high velocity team building an enterprise focused Federated GraphQL solution.
- Participated in the design and implementation of Grafbase Gateway, a GraphQL Federation Gateway that demonstrated best-in-class runtime and query planning performance. Co-developed the WebAssembly (WASI preview 2) based extensions system.
- Developed features in close contact with Enterprise customers. For example a revamp of the authentication and authorization architecture of the Grafbase platform for self-hosted scenarios, with deep integration with the enterprise's identity provider and policy engines (Cedar, AuthZEN).
- Led the design and development of schema evolution features, like schema proposals and usage-based (ClickHouse) breaking change analysis.
- Started and maintained the first and only Rust implementation of federated GraphQL composition.
- Engaged with GraphQL working groups (Composite Schemas) and gave talks at GraphQL Conf 2025.
- Owned Kubernetes deployments of the Grafbase platform, monitoring, integrations, OAuth/OIDC, …

Senior Engineer, Tech Lead   Sept. 2019 – Oct. 2023
Prisma   Berlin, Remote

- Second Rust hire at Prisma. Started on the Scala to Rust migration (Prisma 1 to Prisma 2), then worked on the Rust components of the ORM over four years. Weekly downloads grew about 115x over that time frame.
- Three years as Tech Lead of the Schema Team, responsible for the Prisma Schema Language and its implementation, and the whole database schema management space.
- Subsequently, worked on the Client Team, responsible for the Query Engine behind Prisma Client.
- Owned the size project leading to considerable binary size reductions (in particular for serverless use cases), and spearheaded the WebAssembly migration effort.
- Reworked the Prisma Schema Language (PSL) implementation to use traditional programming language parsing techniques, massively improving performance and ease of implementing validations.
- Built the language intelligence infrastructure for the PSL LSP server and the PSL formatter.
- Introduced rigorous benchmarking in different dimensions (release sizes, compile time, resource usage, performance).
- Engaged in hiring for ICs, Engineering and Product Managers, mentoring and formal feedback rounds.
- Proposed and ran Rust and database engineering learning groups for engineers.
- Still all time top contributor to prisma-engines to this day.
- Led high impact projects: native types support, Postgres extensions, isolating the query planner, …

Engineer, Senior Engineer, Tech Lead   Oct. 2016 – Sept. 2019
store2be   Berlin

- Second engineering hire as Full Stack Engineer on a B2B booking platform with Ruby on Rails, Postgres and Kubernetes on the backend, and React on the frontend.
- Introduced and drove adoption of TypeScript, and later GraphQL to the team.
- As Tech Lead for the whole backend team, I was responsible for hiring, one-on-ones, career planning, formal feedback rounds, and mentoring.
- Bolstered collaboration practices: regular pair programming, systematic, thorough code reviews, regular 1:1s, TDD, product-oriented thinking.
- Built a PDF contract and invoice generation service with per-customer templates support using Rust with futures 0.1 and tokio.
- Took an active part in infrastructure work, migrating from Heroku to Kubernetes and Terraform.

Web Developer and Project Manager   March 2015 – Oct. 2016
Médiéval AFDP   Lyon

- Developed new internal web applications, new public-facing websites and enhanced older websites as the single full-time developer in a heritage-focused company working mostly for the public sector.
- Took on other tasks occasionally: web scraping, batch data manipulation…
- Python (Django), React, Typescript, PHP, PostgreSQL, Ansible, Jenkins, Docker.

Interests

- Long lived interest in **database engines** and database engineering in general.
- Long time **Rust** user who saw the language and ecosystem develop from the very early stages. I have been writing Rust code regularly since 2016–2017, and it has been my primary language at work since I joined Prisma in 2019. You can find more and less recent samples of my code on GitHub.

Skills

- **Languages**: English, French, German, Chinese (HSK level 6 in 2015), Japanese (JLPT N1 in 2015)
- **Programming languages**: Rust, SQL, Lean, TypeScript, Python, Ruby, Scala, C, C++, etc.
- **Technologies**: Database Engineering, Linux, Kubernetes, Docker, Linux, DuckDB, GraphQL, etc.

Degrees

Master's Degree in Tourism Management   Sept. 2014 – Sept. 2015
Université Lyon II

Master's Degree in Political Science   Sept. 2008 – May 2013
Institut d'Études Politiques Aix-en-Provence