

Peter Vlasveld

Senior Software Engineer

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Summary

Senior Software Engineer with 7+ years of experience working in the Biotech industry. Specialized in databases and process orchestration systems for physical and in silico chemistry and biology experiments.

Tools

The following is a non-exhaustive list of technologies that I have spent a considerable amount of time with in my time as an Engineer.

- **Programming Languages** – Python, Rust, Go, SQL, L^AT_EX
- **Databases** – PostgreSQL, MySQL
- **Event Streaming** – PubSub, Kafka
- **Dev Ops** – Docker, Kubernetes, Terraform, GCP
- **Orchestrators** – Camunda, Temporal, Prefect, Apache Airflow
- **Web Frameworks** – Django, FastAPI, Flask
- **AI Code Generation** – Claude Code, Illustrious Manager

Work Experience

Recursion (Dec 2022 - Present)

Senior Software Engineer (Nov 2023 - Present)

- **Tech Leading** – Led a team of 11 Engineers to design and build a process orchestration system called "The Industrialized Workflows System" (IWS) that ran our drug discovery pipeline from end to end. We combined 3 existing bespoke orchestrators into a cohesive system.
- **Data Engineering** – IWS contained a data contract system that ensured data provenance and consistency, feeding all of the data into a data lake, storing petabytes of assay and in silico data. Composable observability views were built on top of all of these data sets in layers to ensure easy queriability and maintain a separation of concerns between data producers and data consumers.
- **Maintaining Legacy Services** – Became responsible for the maintenance of 30+ legacy services (microservice architectures). These were mostly old orchestration systems built around our physical labs. Maintenance mostly included upgrading dependencies when they became EOL. Many of these systems were untouched for several years, and lacked documentation.

Software Engineer (Dec 2022 – Nov 2023)

- **Building for High Throughput** – Helped build features for a high throughput Mass Spectrometry lab called "RADME-01". Worked closely with scientists in the lab, and designed a system that would pack 384-well plates with up to 6 compounds per well.

Cyclica (Apr 2019 – Dec 2022)

Intermediate Software Developer (Dec 2020 – Dec 2022)

- **Data Warehousing** – Helped to design and implement an internal data warehouse called "BioRef" that housed ~132 million rows of protein-target interactions from internal and external data sources. These data were used to train our in-house ML models.
- **Data Pipelining** – Built scalable data loading pipelines both for loading and consuming data from our data warehouse (mentioned above).

Junior Developer (Apr 2019 – Dec 2020)

- **Maintain SaaS Applications** – Primarily implementing backend features and our SaaS application "Ligand Express" – a protein-target analysis platform written with the Django web framework.

Hobby Projects

I've always enjoyed writing my own software and running servers out of my home. Below are some recent examples of interesting things that I've built.

Illustrious Manager (Feb 2026)

A TUI AI agent tool written in Rust using the Ratatui framework. This has been my primary coding tool for about 4 months now. I find it saves on tokens, and I am able to use my "role" system to delegate the inference out to several different LLM providers simultaneously.

Angry Duiker (Mar 2025)

A TUI DLNA music player written in Rust using the Ratatui framework. This solved a very niche problem for me, the ability to play music off of my self-hosted DLNA server from my terminal.

Logic 2020 (Aug 2019)

Based off of the same concept as the Logic 2010 Java app used in university logic classes, Logic 2020 is an attempt at writing that as a Django-React app from scratch. Having studied Philosophy, I find logical derivations to be very fun.