Emil Larsson



“The only constant in the technology industry is change.”

Summary

I am a skilled software and platform engineer dedicated to creating top-quality, maintainable software. Proficient in Python, Node.js and TypeScript, I build REST APIs, event-driven and serverless solutions in the cloud, and the CI/CD and infrastructure as code that ships them. I tackle complex challenges systematically. I am committed to exceeding client expectations, continually improving my skills, and staying current with the latest tech and best practices in software development. My focus is on building reliable, scalable, and easy-to-maintain software.

Skills

React · CI/CD · GitOps · Git · Observability · JavaScript & TypeScript · Node.js · Google Cloud Platform · REST APIs · Python · FastAPI · Bash · Linux & Unix · Platform Engineering · Agentic Workflows (OpenCode, GitHub Copilot & Claude) · Firestore · Next.js · Amazon Web Services · Vue · Infrastructure as Code · Terraform · Docker · MLOps · Cloud Security & IAM · React Native · Unit & E2E Testing · Figma · Go · Microsoft Azure

Experience

Senior Platform Engineer · Ingka Group (IKEA)

March 2025 - May 2026

Utsikt · CONTRACT

Part of the team that built and maintained the platform and infrastructure for the AI/ML part of Utsikt, where a genetic algorithm was trained on large volumes of sales data spanning many countries and markets to optimize pricing. My focus was making the model trainable, repeatable and observable in production, running containerized Linux workloads on Cloud Run, distributing the load so training could scale across markets, reading training data from BigQuery and persisting every training result in Cloud SQL. The platform was defined as infrastructure as code in Terraform and rolled out GitOps style through CI/CD pipelines in GitHub Actions, with the repository as the source of truth, so the whole training environment could be recreated from git. I maintained and developed the platform in production, instrumenting the training runs with Cloud Monitoring, Cloud Logging and Cloud Trace, handling troubleshooting and incident response when jobs failed or degraded, and tuning how workloads were sized and scheduled to keep cloud cost proportional to the value of each run. Security was part of the platform rather than an afterthought, with secrets in Secret Manager, least privilege service accounts and policy as code. Quality was guarded by automated testing in CI, with snapshot tests to catch any unforeseen changes in training data and results, Pytest for unit tests and Playwright for end-to-end tests. I worked closely with the data science team to take models from experiment to production.

MLOps | Distributed training | Platform engineering | Python | Infrastructure as Code (Terraform) | GitOps | CI/CD (GitHub Actions) | Docker | Linux | Cloud Run | Cloud SQL | BigQuery | Bash | GCP | Observability (Cloud Monitoring | Logging | Trace) | Incident response | Secrets management | Least privilege IAM | Policy as code | Cost optimization | Automated testing | Snapshot testing | Pytest | Playwright | GitHub Copilot

Senior Fullstack Developer · Ingka Group (IKEA)

March 2024 - March 2025

Utsikt · CONTRACT

Worked on a data product built to help IKEA make informed, data-driven decisions. I maintained and developed the Python FastAPI REST API that served the data product, both to the frontend application and to a Python package that let stakeholders easily interact with the data we provided. I also owned that package, including its versioning and release as a pip package through automated CI/CD. I maintained and extended the data pipeline behind it, orchestrated with Cloud Composer and Dataform on top of BigQuery, to keep delivery of high quality data consistent. I also contributed to the frontend application used for data visualization, building new features and keeping the app performant and scalable. Everything was covered by automated tests in CI, with Pytest for unit tests, snapshot tests to catch unforeseen changes in the data, and Playwright for end-to-end tests of the application. Working closely with the data science team, I safeguarded the accuracy of the data and made sure the right insights reached the right people, following best practices in development, data handling and data security.

Python | FastAPI | REST API | pandas | pip package and version management | Developer experience | CI/CD (GitHub Actions) | BigQuery | SQL | Cloud Composer | Dataform | Jupyter Notebook | Automated testing | Pytest | Snapshot testing | Playwright | TypeScript | Node.js | Next.js

Frontend Developer · GESHDO

November 2023 - March 2024

TimeNow

Expanded the administration functionality of our web-based time tracking application, TimeNow, at GESHDO. The application is designed to provide a seamless experience for users to track their time and manage their worked hours. Emphasized accessibility and responsive design in the development process. Implemented code structure improvements and introduced shared engineering standards and reusable patterns, a golden path for the team to follow, which lifted developer experience, team performance and code quality.

TypeScript | Accessible Web Development | Responsive Design | Vite | Git | API Integration | Engineering standards | Developer experience

Frontend Developer · Avantad

November 2023 - January 2024

CONTRACT

Led the development of a robust web-based CRM system at Avantad, enabling clients' customers to manage subscriptions and payments. Emphasized accessibility and responsive design in the development process. Leveraged the power of Next.js 13 and implemented React Server Components (RSCs) to construct a scalable and performant application.

TypeScript | Accessible Web Development | Responsive Design | Next.js 13 | Node.js | Git | Azure Devops | API Integration

Fullstack Developer · Ingka Group (IKEA)

September 2021 - November 2023

Edge Engineering · CONTRACT

Full-stack innovation and exploration role with a strong cloud engineering focus, spanning frontend, backend and the infrastructure underneath. I designed and shipped scalable cloud solutions across GCP, AWS and Azure, building containerized and serverless Linux workloads with Docker, Cloud Run Jobs, Cloud Functions and Azure Functions, and automating their delivery with CI/CD pipelines in GitHub Actions. On AWS I used Amazon SNS and SES for event-driven messaging and email notifications. I was a go-to resource for cross-functional collaboration and rapid prototyping, taking ideas from prototype to production and setting projects up to a high standard with unit and end-to-end testing baked in. Among other things I implemented an in-house event-driven analytics solution that replaced third-party tools like Google Analytics.

TypeScript | Node.js | Go | Bash | Linux | Python | CI/CD (GitHub Actions) | Docker | Cloud Native | Multi-cloud | Cloud Run Jobs | Cloud Functions | Azure Functions | Amazon SNS | Amazon SES | Event-driven architecture | Prototype to production | React | Next.js | Express.js | Vue.js | Git | JIRA | Confluence | Figma | GCP | AWS | Azure Active Directory (Azure AD) | Pytest | Jest | Mocha

Fullstack Developer · Ingka Group (IKEA)

January 2021 - August 2021

Jobba/Checka · CONTRACT

Proficiently managed the concurrent development of two projects. One project focused on crafting an office space staff capacity allocation planning tool, streamlining office space management. The second project entailed developing an internal system for effortless office equipment ordering within the organization. Key responsibilities included frontend development, backend API design and development, and the implementation of an event-driven, serverless data sanitization pipeline on GCP to ensure GDPR compliance.

TypeScript | Node.js | GCP Cloud Functions | GCP Pub/Sub | BigQuery | Vue.js | Express.js | Git | JIRA | Confluence | GCP | Azure Active Directory (Azure AD) | Postman Testing

IT Consultant · GESHDO Now AB

January 2021 - Present

EMPLOYMENT

GESHDO specializes in dynamic IT consulting, driven by a commitment to tailored solutions. We prioritize rapid delivery to align with your goals while managing costs effectively. Our expertise spans all the major cloud platforms like AWS, Azure, and Google Cloud. Back-end development, with diverse languages and frameworks, equips us to solve complex challenges. Our front-end consultants blend design finesse with technical precision to create seamless, visually appealing interfaces. GESHDO pushes boundaries to provide optimal, adaptable solutions for your organization. In my own work I use agentic coding workflows with OpenCode, GitHub Copilot and Claude as a standard part of how I build software, from prototyping through to production.

Agentic workflows (OpenCode | GitHub Copilot | Claude) | AI-assisted development | Generative AI | Prompt engineering | AWS | Azure | GCP

Software Engineer · Collner Kiteboarding AB

July 2020 - December 2020

EMPLOYMENT

Worked closely together with the product owner to develop a mobile application using React Native, with a serverless backend on AWS. I built the backend with AWS Amplify, using Cognito for authentication, DynamoDB for data persistence, SES and SNS for email and notifications, and Lambda functions scheduled with EventBridge (CloudWatch Events) rules that ran automated data sanitization. As the only developer on the project at the time, I was also responsible for planning, prioritizing and deciding on everything related to the technical stack.

AWS Amplify | AWS Lambda | Amazon EventBridge (CloudWatch Events) | Amazon DynamoDB | Amazon Cognito | Amazon SES | Amazon SNS | Serverless | JavaScript | Node.js | React Native | Git | Slack webhook integrations

Frontend Developer · Cybercom

September 2019 - June 2020

EMPLOYMENT

Development of various interactive web applications aimed at displaying and analyzing big amounts of data. With the amount of data, main focus was on frontend optimization to provide our users the best possible experience. Additionally, I built a custom solution for web scraping, utilizing Puppeteer, to gather data from an in-house tool that were then used by another team to optimize their ML model.

JavaScript | Node.js | React | Express.js | Chart.js | Puppeteer

Personal projects

Web platform for an online gaming community

Developing and maintaining a full-stack web platform for a gaming community with around 500 daily active users. It handles 100–200k requests per day, with peaks of ~400k, and runs on a single self-hosted Linux VPS behind Cloudflare. The platform tracks members' in-game progress, runs competitive community events with live updates, and connects with Discord and a companion game-client plugin that reports in-game activity in real time.

Features include:
• Member profiles with progress tracking, achievements, statistics, leaderboards and historical charts, built from in-game data the plugin sends in real time
• An event engine for several competitive formats (bingo, battleship, drafts and custom boards), with sign-ups, automatic team generation and live updates over Server-Sent Events
• Anti-cheat checks that flag duplicate or suspicious submissions for staff review
• Discord integration with bots, automatic team channels, interactive button messages and notifications
• Server-side image generation for shareable gear setups, plus image uploads and a text-paste service
• A rich-text editor for staff-managed content such as rules and guides
• Role-based access for members, staff and admins, using JWT authentication

Performance and operations:
• An in-memory cache that merges identical concurrent database queries into one, clears stale entries the moment data changes, and fills itself at startup, keeping heavy pages fast at peak load
• A pooled database connection for each request, so concurrent requests can't interfere with each other's transactions or locks
• Cloudflare in front of nginx as reverse proxy, serving static files directly, with HTTP/2, gzip (about 85% smaller API responses) and cache headers on build assets
• Built-in request monitoring of latency per route, slow requests, peak concurrency and event-loop lag
• Automated sync of game data that downloads and parses the game client's cache and loads items, NPCs and assets into MySQL, so new content from the game's weekly updates shows up without manual work, plus daily pulls of drop rates and other reference data from the community wiki
• Scheduled jobs for data sync, score calculations and table partitioning
• CI/CD with GitHub Actions on a self-hosted runner, with deploys that never leave the site half-updated, nginx config checked before every reload, and automated database backups
• Large integration test suite run against a real MySQL database

JavaScript | TypeScript | Node.js | Express | React | TanStack Query/Router | Tailwind CSS | MySQL | nginx | Cloudflare | PM2 | Linux (Ubuntu VPS) | GitHub Actions | Server-Sent Events | Discord API | Python | Zod | Three.js | Recharts | Data pipelines

Education

Frontend Developer program

EC Utbildning · 2018 - 2020

Program focused on teaching frontend development with an emphasis on building high-quality web applications using industry-standard technologies. Acquired proficiency in modern front-end technologies, including HTML, CSS, JavaScript, and React, through coursework and internships. Gained valuable soft skills such as effective communication and agile development methodologies.

Exam Project:
We created a solution for veterinary professionals, enabling them to render 3D models generated from MRI scans within a web application. This allowed the veterinarians to provide pet owners with insights into their pets health, enhancing the overall care and communication in veterinary practice.

C# Programming

Malmö University · August 2017 - January 2018

This course focused on teaching the fundamentals of object-oriented programming using C#.

Certificates

GitHub	GitHub Copilot **2026** · GitHub Actions **2026**
DeepLearning.AI	Generative AI for Software Development **2025**
HashiCorp	HashiCorp Certified: Terraform Associate **2022**
Meta	Advanced React **2023**
Udemy	Clean Code **2023** · Design Patterns in JavaScript **2023** · SOLID Principles of Object-Oriented Design and Architecture **2023** · The Nuts and Bolts of OAuth 2.0 **2023**

Languages

Swedish Native

English Advanced