

Senior Software Engineer

I am a senior software engineer specialized in backend systems. I started as an autodidact in 2008 and acquired a strong expertise over time.

While software quality, scalability, architecture, and developer experience are topics that fascinate me, I am curious about other domains like compilation and static analysis.

I am at my best when I can have a positive impact on my surroundings while working and sharing on topics related to software architecture and software quality. I like to see myself as a passionate developer, an Open Source enthusiast, and an eternal learner.

Work Experience

Nov. 2021 **Developer Experience Engineer**, VOI, Stockholm, Sweden.

Current Recognizing the benefits an awesome developer experience could bring to the organization, I branched out of *Platform* and spearheaded the *Developer Experience* team.

Our motto: "Making the right thing easy"

My biggest contribution is the introduction of an **engineering portal based on *Backstage.io*** — a project that started soon after I joined *Platform*.

This portal features a software catalog, technical documentation on our services and processes, Voi-specific tools, and a component scaffolder.

The latter allows us to **create and deploy new services in minutes** when it used to take days, while offering a large number of features out of the box.

Our most popular Voi-specific feature is a *Backstage* plugin that **automatically evaluates and scores services** according to "accepted best-practices" and non-functional requirements. These scores — and recommendations on how to improve it — are presented **in a gamified way** to focus on continuous improvement.

An important part of my role is to define and observe key metrics, conduct **user research** — direct conversations, surveys, a "*DX ambassador*" program, ... — to **determine the pain points** and issues encountered by engineers and alleviate them.

Enabling teams to focus on delivering scalable applications with high speed, quality and performance, without compromising on engineering happiness is an amazing challenge. With deep ramifications in various areas: tooling and automation, observability, education and practices, communication and user research, company strategy, ...

January 2020 **Platform Engineer**, VOI, Stockholm, Sweden.

21 months My drive to increase the safety and reliability of our services without compromising on developer efficiency lead me to my second role at Voi: Platform engineer, within a *Platform* team that I helped create. Our mission was to reduce friction for developers by providing reliable and secure infrastructure, processes, and self-service tools.

We defined our entire **infrastructure as code with Terraform**, used Kubernetes Config Connector for Dataflow jobs, and *grabana + DARK* for Grafana dashboards.

We **strengthened our security** by making our Kubernetes clusters read-only and accessible only via a bastion host. Similarly, we migrated our secrets into GCP Secret Manager in combination with Kubernetes External Secrets to ensure a safe lifecycle.

All deployments are fully automated thanks to our CI/CD pipelines and ArgoCD, with an automated and audit logged privilege escalation system in case of emergency.

Both for security and developer experience reasons, we stopped using username/password credentials for our CloudSQL instances, in favor of **IAM-based authentication**.

To help with **monitoring and observability**, we set up and maintained services such as Jaeger, Grafana, Prometheus and offered a way to measure SLOs, as well as providing the engineering community with **documentation and education** — as workshops — on these technologies.

Incidents are never an *if* but a *when*. To make responding to one safer, I lead the **definition and training on our incident management process**. Involving various teams and stakeholders across the organization.

April 2019 **Software Engineer**, VOI, Stockholm, Sweden.

9 months As a member of the *Fleet Operations* team, I contributed to the **Golang micro-services** we owned to support the complex business needs associated with the management of a fleet of electric scooters. I also drove several initiatives to help us deliver faster and better features:

- using OpenAPI to document our HTTP APIs
- CI/CD pipelines based on Github Actions
- adoption of the "backends for frontends" architecture style to define clear boundaries between our domains and clients

To better help my team organize itself and keep a steady delivery flow without falling into unsustainable ways of working, I assumed the **Scrum Master** responsibilities.

January 2017 **Teacher**, Université d'Auvergne, Clermont-Ferrand I.

6 months During my time at TEA, I taught two classes at Clermont-Ferrand I university. The semester with PHP classes and practicals in which we went through the basics of modern web application development. We then drilled into the **Symfony** framework and some of its most-used components. During these two classes, I kept **pragmatic thinking, software quality, security**, and tests as a background theme.

April 2015 **Software Engineer**, TEA – *The Ebook Alternative*, Lyon, France – Barcelona, Spain (remote).

3 years TEA builds a B2B platform allowing booksellers to sell electronic books. I took part in the development and maintenance effort of the 20+ projects composing the platform, mostly written in PHP. In addition to pure development tasks, I also **acted as a tech lead** for some key projects.

August 2010 **Freelance Developer**.

5 years In parallel with my studies, I worked as a **freelance developer**. Most of my work consisted in developing web applications based on **Symfony, MySQL, Doctrine**, and **Redis**.

April 2014 **Web Developer**, Kryzalid, Montréal, Canada.

4 months 4-months internship in **Montréal** during which I maintained and shipped new features for a homemade CMS used by real-estate brokers. I discovered several design and security flaws in the API used by the project and lead their mitigation.

April 2011 **Web Developer**, *Carpe Hora*, Clermont-Ferrand, France.

16 months Contributed to the development of a calendar application aimed at facilitating the appointment-making process for professionals.

Open Source

Since Nov **Opsgenie Backstage plugin**, *Maintainer*.

2020 <https://github.com/K-Phoen/backstage-plugin-opsgenie>

Plugin that displays Opsgenie alerts, incidents and on-call information in Backstage.

Since March **DARK**, *Maintainer*.

2020 <https://github.com/K-Phoen/dark>

(*grafana*) **Dashboards As Resources** in **Kubernetes**.

Since Jan **grabana**, *Maintainer*.

2020 <https://github.com/K-Phoen/grabana>

User-friendly Go library for building Grafana dashboards.

Since **RulerZ**, *Maintainer*.

January <https://github.com/K-Phoen/rulerz>

2015 PHP implementation of the *specification* pattern with an emphasis on three main aspects:

- a data-agnostic DSL
- the ability to check if a candidate object satisfies a specification
- the ability to filter or query any data-source to retrieve candidates matching a specification

This project gave birth to several conference talks, see "Be specific".

October 2013 **VichUploaderBundle**, *Maintainer*.

~3 years <https://github.com/dustin10/VichUploaderBundle>

Symfony bundle that simplifies mapping file uploads to ORM entities, MongoDB ODM documents, PHPCR ODM documents or Propel models.

I started by fixing bugs and ended up maintaining the project.

Featured Skills

Google Cloud **CloudSQL**, Spanner, **BigTable**, Dataflow,
Platform **Pub/Sub**

GKE, Kubernetes Config Connector, Cloud
Functions, **IAM**

Languages **Golang**, Python, PHP, TypeScript

(*R*)**DBMS** PostgreSQL, MySQL, Elasticsearch, Redis

Tools Git, vim, **Kubernetes**, Docker, Terraform,
Jaeger, **Grafana**, **Prometheus**

OS **ArchLinux**, Debian

Languages

French Native speaker

Spanish Professional working proficiency

English Fluent

Activities and Interests

Sports Squash, Running, Hiking, Geocaching

Leisure Reading, Board games, Travel

Computer Science Regular contributions to Open-Source
projects and conferences

Education

2015 **Master**, *Université Blaise Pascal, Clermont-Ferrand II*.

Equivalent to a Master's Degree in Computer Science

2013 **Licence**, *Université d'Aix-Marseille*.

Equivalent to a Bachelor's Degree in Computer Science

2011 **Diplôme Universitaire Technologique (DUT)**, *Université d'Auvergne, Clermont-Ferrand I*.

Equivalent to a Two-year University Diploma in Computer Science