

Greg Charvet 黑瓜

Senior Software Engineer

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10+ years of experience building web & cloud applications

Experience

- April 2022– **Contract Software Engineer, Ernst & Young.**
- March 2023 Team lead for complex tax calculation product in the USA. Coordination with business stakeholder, design and ship required features. Mentored 2 other team member new to clojure.
Key tech : clojure, kubernetes (k8s) and docker, azure storage and CI/CD pipelines.
- April 2020– **Senior Software Engineer, Gousto.**
- April 2022 Lead and built part of our order fulfilment system, where we ship boxes of ingredients to various fulfillment centers. Worked on direct integration with our warehouse management system to meet SLA with the packing team (otherwise not enough time to fulfill orders). Coordinated and directed the work to onboard a data science product onto our platform to improve our routing infrastructure.
Key tech : AWS lambda with python, fastAPI, in an event driven architecture using SNS&SQS, AWS ECS, DynamoDB and infrastructure as code (cloudformation) extensively.
- Oct 2018– **Senior Software Engineer, Habito.**
- Jan 2020 Built and launched a mortgage origination platform in haskell and purescript. Worked on splitting a monolithic application into various services to be run on kubernetes. Event sourcing based system, ensured compliance with financial authority. Also managed integration with various 3rd party providers (credit search, valuation, identity verification...).
Key tech : Haskell and purescript, kubernetes, PostgreSQL, RESTful API.
- Dec 2016– **Cloud engineer, Youview.**
- Oct 2018 Designed, developed, deployed and monitored of various API in a microservices oriented architecture. Worked with other team to keep latency low during traffic spikes. Mentored grads and colleagues, teaching them clojure, software engineering and cloud development.
Key tech : Clojure and node.js (80/20 split), AWS ECS&EC2, Kinesis, DynamoDB, PostgreSQL, RESTful API and infrastructure as code (cloudformation) extensively.
- Mar 2015– **Full stack engineer, Opensignal.**
- Nov 2016 Redesign and improved our API to collect data from millions of devices (and counting). Deployed a maptile server for our coverage maps. Implemented data driven dynamic reports on our website which are now our main sales lead.
Key tech : Python and node.js (60/40 split), AWS ECS&EC2, S3, PostgreSQL.
- Oct 2013– **Lead backend developer, Digbil.**
- Dec 2014 Design, implementation, deployment and monitoring of a node.js REST api with two purposes : JSON api for a single page app, and remote control of our fleet of digital signage. Built on top of express.js, with mongoose and redis. Deployed on AWS using opsworks (chef).
Key tech : node.js deployed on AWS EC2, websockets

IT skills and Languages

Languages **python, clojure, rust, haskell, node.js.**

Wrote multiple applications and web API, with these languages, from big monoliths to microservices. From traditional REST API to CQRS with event sourcing based architecture.

Databases **PostgreSQL, DynamoDB.**

Extensive use of PostgreSQL and DynamoDB. Migrated one big project from dynamodb to postgresql, and kept the same semantics as well as good performances.

Platform & tools **Linux** and coreutils, **(n)vim**, git, kubernetees

AWS especially : lambda/serverless, s3, dynamodb, rds, sns, sqs, ecs

French native

English fluent

Chinese full working proficiency (mandarin)

Education

2006–2008 **Master of engineering**, *Télécom Paristech*, Paris, France.

General engineering school. I majored in Computer Science.

2008–2009 **Intensive chinese courses**, *Beijing Language and Culture University*, Beijing, China.

2009–2011 **Master research**, *Tsinghua University*, Beijing, China.

Major in Software Engineering and networking (all in chinese).

Interests and activities

- **ice skating, baking**
- Interest in **programming language design and networking**
- Some silly IRC bots : **rustygolem** (rust) and **lambdaCoucou** (haskell)