Chris Bailey
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Summary

Pragmatic software engineer with a variety of experience building highly distributed, reliable systems and providing full-stack, multi-disciplinary expertise.

Extremely excited about the Erlang/Elixir ecosystem, Svelte, and building simple, efficient, and robust software solutions for any problem. Eager to work in a small, autonomous team and influence product vision.

Personal website

https://cbailey.co.uk

Professional Experience

Software Engineer at Erlang Solutions, London, United Kingdom (August 2018–present)

Consulted for a small innovation lab at an international metal distributor *(6 months):*
- Backend development focused on automating manual order processing/ERP submission using Elixir, Absinthe, PostgreSQL, RabbitMQ.
- Pair programming with junior developers to instill knowledge about how to write maintainable Elixir and common Elixir patterns.
- Re-architected core synchronous flows into asynchronous ones using RabbitMQ, working closely with designers and product owners to ensure end users are not affected.
- Led effort to refactor a tightly coupled monolith into small and independently deployable applications inside an Elixir umbrella application, leveraging multiple release targets for different deployment strategies.

Built MVP of internal certification and examination app *(3 months):*
- End-to-end delivery of a MVP certification and examination web app to allow Erlang Solutions to deliver Erlang/Elixir certifications remotely in light of the COVID-19 pandemic using Elixir, Phoenix, Stimulus.js, and TailwindCSS.

Consulted for the European branch of a global mobility startup working with multidisciplinary product teams *(1.5 years):*
- Fullstack feature development on two projects using Elixir, Absinthe, and PostgreSQL, with frontend development in Ember.js and Apollo. Worked closely

with external stakeholders to translate product requirements into actionable work for engineers.
- Supported production environments, troubleshooted product launches, and deployed several times a day into a Kubernetes cluster.
- Implemented an authorization and permission management microservice in Elixir, exposing a custom DSL and graph abstraction to clients via GraphQL.
- Implemented abstraction layer on top of Ecto which allowed us to subscribe to database events and publish them to third parties.
- Owned end-to-end delivery of a proof of concept product to support client pitches; worked closely with a product owner and UX designer to bring their ideas to a working demo on a short deadline.
- Worked as part of a team to deliver a proof of concept virtual car key product for a client accessibility hackathon, using Elixir, Svelte, and JavaScript, integrating the Web Bluetooth API.

Developing PoC for a large payment processor in the United Kingdom *(3 months)*:
- Scaled payment gateway throughput from 1000s of requests per second to 100,000s of requests per second based on an approach outlined in an academic paper, and by leveraging Erlang and OTP.

Intern Fullstack Engineer at ionCube, Canterbury, United Kingdom (July 2016–July 2017)

Developed features for a DevOps-aaS single page app: ioncube24.com. Extensively used JavaScript (AngularJS) on the frontend, with PHP (Phalcon) and NodeJS on the backend.

Education & Training

Erlang Solutions–OTP Certification Training

Erlang Solutions–Erlang Certification Training

University of Kent, Canterbury–1st Class Honours (4.0 GPA):

Strong focus on Erlang/Elixir; produced an Erlang⇒JavaScript compiler for my final year research project.

Notable electives included *Operating Systems*, *Compilers & Interpreters*, *3D Graphics Programming*, and *Functional & Concurrent Programming*.