

EXPERIENCE

Bluezone Insurance

London

Chief Architect

July 2024 - Present

- > Leading the engineering effort to build uncommon insurance for common conditions.

Hubpay

London

Senior Software Engineer

August 2023 - Present

- > Hubpay is a Fintech startup with a licence in the UAE, that started out with a retail foreign exchange app.
- > Currently part of a small team building a B2B FX platform for underserved markets.
- > Spring Boot + Java on the backend.
- > React + TypeScript on the frontend.

Startup attempts

London

Aspiring startup founder

April 2023 - August 2023

Splittr

- > Teamed up with someone who had a commercial background and was looking for a technical co-founder on the YCombinator co-founder matching platform.
- > Built a B2B2C checkout platform for group events end-to-end, allowing people to acquire multiple tickets while only paying for their share.
- > Spring Boot Kotlin service on the backend hosted on AWS Fargate. TypeScript + React on the frontend. Infrastructure as code using Pulumi.
- > Had a few promising leads that ultimately did not convert.

Antler

- > Got accepted to Antler's 3 month cohort dedicated to developing and testing a startup hypothesis, with the aim of securing investment.
- > Found a co-founder & had weekly pitches, with constant iteration.
- > Validated ideas by conducting in-depth market research & user interviews.
- > Got advisors on board & potential customers with letters of intent.
- > Ran advertising campaigns & did "things that don't scale" in order to further validate the idea.
- > Ultimately did not get investment on our B2C proposition, mainly because of concerns over our Cost of Acquisition.

Tech

Languages

Java 17
Kotlin
Swift
TypeScript
JavaScript
Python

Frameworks

Spring Boot
Spring Data
OpenAPI
MapStruct
React
UIKit
SwiftUI
Terraform
Pulumi

Infrastructure

AWS Fargate
AWS DynamoDB
AWS RDS

Tools

Jira
Notion
PagerDuty
Sentry
Stripe
Checkout

AirPocket

- > Built a proof of concept web app allowing people to plan & book multi-stop trips in one go, including all flights & hotels.
- > Ran a modest ad campaign on Instagram to soft launch this.
- > Booked some trips & gathered feedback.
- > Building a second version part-time, looking to address feedback & allow more flexibility in the itineraries generated.
- > Spring Boot Kotlin service on the backend hosted on AWS Fargate. TypeScript + React on the frontend. Infrastructure as code using Pulumi.

Marshmallow

London

Software Engineer

August 2019 - April 2023

Some projects:

- > Took iOS app from a hackathon proof of concept to a 4.8 star app with 6 dedicated mobile engineers.
 - > Generated code for Spring Boot server + iOS & Android clients by leveraging OpenAPI.
 - > Integrated with Auth0 SMS passwordless login & secured endpoints with Spring Security.
 - > Built core functionality to view policy details, chat with customer support, & integrated web views in a native-friendly way.
 - > Developed a secure way to switch the backend environment of production builds of the app, so that Apple reviewers could test it without a production account.
 - > App is now used for crucial flows such as ID checks, claims & telematics.
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- > *Unlocked new segments via in-app telematics.*
 - > Started brand new team to leverage motion & location data from the app, turning it into a way to reduce car insurance risk
 - > Onboarded 2 backend engineers, mentored mobile engineers to contribute to backend
 - > Enriched & persisted transport & driving data from customers
 - > Developed a proprietary driving score that identifies less safe drivers and encourages them to improve
 - > Uncovered risky behaviours by analysing speed, acceleration, & braking & notified operations teams
 - > Detected crashes & notified intervention team
 - > Exposed location manipulation or other unwanted behaviour such as uninstalling app

> *Led Payment Service Provider migration from Stripe to Checkout.*

- > Created an internal payments service capable of dealing with both providers as well as specific internal requirements.
- > Built an invoicing system.
- > Created SCA compliant flows on backend & frontend, supporting multiple payment scenarios.
- > Made direct integrations with Apple Pay & Google Pay.

Education

Queen Mary University of London

London, United Kingdom

Computer Science

September 2016 - June 2019

Integrated Master's in Science

Progressed from the University of Westminster directly into the second year of a four-year integrated master's program.

I gained my MSci qualification in June 2019 while working at TransferWise.

Modules included:

- > Algorithms and Data Structures in an Object-Oriented Framework
- > Artificial Intelligence
- > Big Data Processing (with projects using Hadoop & Spark)
- > Compilers
- > Data Mining
- > Database Systems
- > Graphical User Interfaces (with projects using React)
- > Interaction Design
- > Internet Protocols and Applications
- > Operating Systems
- > Probability and Matrices
- > Software Engineering
- > Web Programming (with projects using Django)

University of Westminster

London, United Kingdom

Software Engineering

September 2015 - June 2016

Completed the first year of my course at the University of Westminster whilst working.

Fun facts

- > Big fan of road trips, bad luck when it comes to not breaking down on the way.
- > Love a good karaoke session.
- > Hackathons make me feel like a kid who just got told "here, eat all the chocolate you want".

› *Built in-house system monthly instalment payments.*

- › Allowed customers to split their annual premium into interest-free monthly card payments
 - › Tracked monies owed & payments made
 - › Adaptable based on price changes, overpayments & refunds
 - › Kept other systems in-sync
 - › Managed arrears, automatically issuing invoices & chasing
 - › Mentored junior developers in the team
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› *Introduced an Apple Wallet claims card.*

- › Generated an Apple Wallet card on the backend containing key policy information & a QR code to a web form
 - › Customers download this card to their wallets, and upon crashing, show it to a third party
 - › Third party completes web form & exchanges their details
 - › Marshmallow gets automatically notified
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› *Improved Open Banking experience.*

- › Improved existing Plaid integration so that backend driven fetching of banking transactions could provide real time feedback to frontend.
 - › Demystified error codes for customers, prompting them to take appropriate actions to fix their Open Banking connection.
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› *Made an event sourcing database searchable.*

- › Replayed events in real-time in a separate database to build an always up-to-date queryable form of our policies
 - › Linked it up with paginated search endpoints
 - › Built a search frontend on an internal portal to manage policies
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› *Developed internal tooling for the first notification of a claim by customers.*

- › Allowed frontend to send JSON patches so that every bit of information is persisted as soon as possible & a history of all changes is kept on the backend
- › Validated against JSON schema on the backend & propagated relevant errors back to the frontend
- › Replayed changes & submitted full report to third party

Wise

London

Software Engineer

June 2017 - July 2019

Initially in Tallinn as an intern for 3 months, then hired full-time in London.

- › Designing public facing RESTful APIs.
- › Designing new database schemas and altering large existing ones to accommodate new requirements with zero downtime.
- › Designing services for graceful degradation.
- › Migrating a core piece of functionality (money recipients) from a monolith to a micro service while maintaining uptime
- › Implementing feature requests from third party banks while maintaining backwards compatibility for previous API versions.