



James Macmillan

SENIOR SOFTWARE ENGINEER

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📍 Birmingham, UK

Availability: Immediate

Senior Software Engineer with 14 years building web, mobile and cloud platforms, from native mobile integrations to serverless APIs and pipelines handling over a million releases a day. I work across the stack, get productive on new languages quickly, and care most about shipping robust software that the people using it actually need.

Cover letter

Hi, I'm James, a Senior Software Engineer based in Birmingham, looking for a remote senior role.

I have 14 years of commercial experience across web, mobile and cloud. Most recently at Songtradr, I re-engineered a music ingestion platform from 250k to over a million releases a day, replaced a legacy Solr service with sub-second search, and took load off a database costing ~\$30k a month. Before that, I took a mobile app that crashed in most sessions to 99.9%+ crash-free, and cut a portal's dev build time from five minutes to thirty seconds.

I work best in teams that pair, ship often and choose the simplest thing that works. I ran a series of knowledge-share talks on adopting AI coding tools safely and well, and I like helping the developers around me get better.

Thanks for reading. If that sounds like what your team needs, I'd like to hear from you.

James Macmillan

Experience

a. Mar 2023 - Aug 2026

Songtradr

Cloud-native music ingestion at a million releases a day

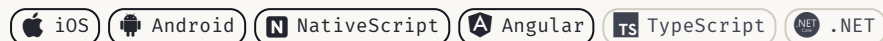


- Re-engineered release ingestion after our Kafka provider shut down and every alternative cost 2x or more. Moved it away from Kafka and lifted throughput from ~250k to 1M+ releases a day.
- Rescued a stalled search rebuild that had reached 30s+ per query, rewrote it on OpenSearch around the real requirements, and retired the legacy Solr service with sub-second, high-quality results.
- Built, migrated onto and ran a master metadata store, from tooling and feature work to ongoing maintenance. It took load off a legacy database costing ~\$30k a month and rising, and now backs the platform's APIs.
- Ran 5-7 knowledge-share talks on adopting AI coding tools (risks, mitigations, tooling and good practice), starting with a group of ~10 peers and widening out across engineering.
- Contributed to security, platform design, support and data analysis across the wider engineering organisation.
- Worked XP-style with daily remote pairing.

b. Jul 2020 - Feb 2023

Engineius

Robust mobile and web development with the users' needs at heart



- Revived an outsourced NativeScript and Angular app that crashed in 80-90% of sessions, taking it to 99.9%+ crash-free and redesigning it end to end with the contractors, third parties and end users who relied on it.
- Wrote native Android and iOS integrations for GPS, camera, background services and permissions in Java, Swift and Objective-C, published as open source NativeScript plugins.
- Kept the apps in step with mobile platform standards, staying ahead of major ecosystem changes such as Apple's WebView deprecation.
- Split the customer portal into an Angular SPA and a .NET API, fixed a vendor bundle that loaded dependencies twice and added lazy-loaded routes, cutting dev builds from 5+ minutes to 30 seconds.
- Hired and mentored new engineers, getting them shipping features quickly.

c. Nov 2017 - Jan 2020

Packt

Making the learning platform mobile, and going serverless



- Brought the subscription learning platform to mobile from a standing start: CI/CD, infrastructure, brand implementation, and the processes and guidelines to develop the web platform and app side by side.
- Got the app through Apple review and kept it passing, with testing and monitoring covering changes shipped to web and app at the same time. The app reached ~3k installs.
- Migrated the backend to serverless microservices on AWS in the early days of serverless, growing to ~250 Lambda functions in production.
- Mentored developers joining software engineering from other careers, and raised standards with a large offshore team.

d. Sep 2012 - Oct 2017

Severn Trent

Web and Mobile Support and Development in a FTSE 100 Company

Java

.NET

Node.js

Angular

TypeScript

Android

iOS

- Built and supported a large estate of customer-facing and internal web apps in Java (Spring, Play) and C# .NET on SQL Server.
- Integrated card payments into customer-facing and internal applications across the estate.
- Front-end lead on the Customer Portal redesign.
- Part of the company's early mobile development: built cross-platform and native Android and iOS apps, and set up Mobile Device Management and the infrastructure behind it.

Skills

I choose tools for the problem and get productive on new stacks fast. These are the ones I've used most in production.

Back end & cloud

Node.js

.NET

GCP

AWS

Terraform

Docker

Serverless

Languages

JavaScript

TypeScript

C#

SQL

Java

Python

Lua

Data

SQL Server

Elastic

PostgreSQL

MySQL

MongoDB

Mobile

iOS

Android

Ionic

Capacitor

NativeScript

Front end

React

Angular

Tailwind

StencilJS

HTML5

CSS3

CI & build

GitHub Actions

TeamCity

Make

Ant

>_ Shell (zsh, Bash)

Outside work

The same habit outside work: find a gap, build the thing, and put it in front of real users.

📷 Photography

Designed the [CampSnap Pro filter packs](#), free retro film looks [used by photographers worldwide](#).

📦 3D design & FPV

800+ downloads on [MakerWorld](#), mostly FPV drone parts like the [Dome whoop canopy](#), rated 4.9 from 43 reviews.

⚙️ Hardware tinkering

Handheld Linux and Pico-8 builds, keyboard firmware, and mods for my own FPV kit.

Education

Coventry University

Sep 2009 - Jun 2012

BSc Computer Science G400, 2.1 with Honours

Caroline Chisholm School

Sep 2002 - Jun 2009

3 A Levels Including Computing

11 GCSEs