Sean McCalgan

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Professional Summary

Accomplished front-end engineer with over 10 years of experience in developing robust web, mobile, and desktop applications, including over five years leading mobile development with Flutter. Proven expertise in scalable architecture, CI/CD pipelines, cross-functional team leadership, managing complex app rewrites and migrations, and leading feature-focused teams to deliver high-quality software solutions. Adept at engaging directly with business stakeholders to translate requirements into actionable technical tasks, generating innovative feature ideas, fostering a collaborative team environment, and leading production deployments. Known for driving efficiency and consistency through the creation of reusable UI components and comprehensive component libraries. Experienced in a wide range of technologies including Vue, TypeScript, Flutter, and more, with a strong commitment to adaptability, learning and continuous improvement.

Work Experience

Lead Software Engineer, Mobile (Flutter) @ Argus Media

Jan 2025 - Present

London, UK

- Technical lead and manager for two mobile teams: the Argus Open Markets app, a market-making service for commodities; and the Argus app, providing analytics, news and market pricing to subscribing clients.
 The apps both rely on a robust component library with an externally facing website for the design team, which I initially created.
- Facilitated feature planning by collaborating with product owners, designers, testers and internal users.
- Championed the architecture across both apps: a feature-first, scalable solution with strict linting, high test coverage and regular performance analysis.
- Led the creation of our CI/CD pipelines using GitHub Actions and Codemagic scripting to automate checks, builds, releases and deployments to both Firebase Distribution and both app stores.
- Coordinated requirements with backend teams, helping to formulate mobile-friendly API approaches.
- Responsible for ensuring a cohesive approach to both technical planning and implementation across the teams, fostering a culture of frequent, constructive feedback in both discussions and code reviews.
- Maintained a hands-on approach whilst ensuring that team members were empowered to work either autonomously or collaboratively when necessary.
- Created job descriptions and conducted both behavioural and technical interviews for Flutter candidates.

Senior Software Engineer, Front-end Lead @ Valarian

Dec 2023 - Jan 2025

London, UK

- Led the front-end team in conceptualising and developing a new app (Vue, TypeScript) to proof-of-concept state in less than 4 weeks, combining features from scheduled health checks to user management.
- Translated business requirements, generated feature ideas, and coordinated construction of a large series of reusable UI components to improve speed of delivery in the above.
- Facilitated the setup and large portion of the initial work on our component library (including Storybook), which served 4 active apps and helped to increase efficiency and consistency of the team's work.
- Primary point-of-contact for creating, managing and assigning tasks to the front-end team, working closely with business and product owners.
- Designed feature wireframes in the absence of a UX designer in the early months of 2024.
- In addition to thorough code reviews, hosted technical discussions and peer-programming sessions to deliver front-end tasks at a rate above the long-term sprint average.
- Consistently received positive upward feedback from the members of my team (formal and informal).

• Actively pushed for and implemented testing capabilities across our largest front-end repos.

Senior Software Engineer @ Valarian

Nov 2020 - Dec 2023

London, UK

- Core contributor to a secure messenger app (Flutter, Dart), the initial rewrite of this app in Swift, and a
 messaging and file sharing dashboard integrated with MS Teams.
- Architected a library for the data and business logic layers originally serving the Flutter app, and then used this to create a Flutter desktop version of the app within 2 months.
- Leveraged native functionality through method channels to enhance the desktop app experience.
- Up-skilled in Vue & TypeScript, with no previous experience using either, to then become the primary contributor to the enhancement of our messaging dashboards.
- Led feature-work including real-time messaging (web-socket communication), compliance management and offline-first approaches (storing data on device/browser, with retry/resend)
- Developed a "guest" feature to our Teams-based messaging, allowing external users or clients to chat with Teams users from their web browsers.
- Created the company's first implementation of an API to serve all the front-end apps through code generation (OpenAPI generator). Later, consolidated multiple API repos into a mono-repo, allowing developers in the company to make updates and releases more efficiently.
- Assisted in task assignment, mentoring and peer debugging sessions within the front-end team.

Software Developer @ Valarian

Mar 2020 - Nov 2020

London, UK

- Primary contributor in a two-man front-end team to the development of features for our messaging app written in Flutter & Dart.
- Took ownership from conceptualising to implementing many features expected in a chat app.

Mobile / Web Developer @ Freelance

May 2019 - Jan 2020

Johannesburg, South Africa

- Architected the early stages of a task and inventory management web app (Angular, MySQL).
- Volunteered as a part-time developer working on UI features of a Swedish-based pop-up store app.

Software Developer @ Retro Rabbit

Sep 2018 - May 2019

Johannesburg, South Africa

- Led small dev teams on MVP / POC projects (Flutter, Xamarin) for external clients, with responsibilities including client liaison, code review, assigning tasks and feature implementation.
- Championed feature-work on a real-time small goods delivery app, including map tracking and live updates.

Mobile Developer @ Business Connexion

Apr 2015 - Aug 2018

Johannesburg, South Africa

- Sole developer of three enterprise-level applications (cross-platform mobile: Livecode)
- Pharmacy script-dispensing app used by over 80 independent stores. Used by pharmacists to replace their paper-based forms and perform script calculations on the spot. Reduced paper costs by ~90%.
- Agricultural insurance app for the insurance agents to use for their complete daily activities, all the way
 from the drive from office to farm (measured travel distance) to recording yield and crop modelling
 calculations. This helped in reducing user-based input errors and saved each user hours of manual work
 per week.

Johannesburg, South Africa

- Guided investment houses and traders on a global scale towards smarter decision-making in the financial markets.
- Managed and led a team of analysts in creating innovative and thought-provoking research using core economic principles.
- Responsible for kicking off the company's initial investigations into bringing their externally developed software in-house.

Education and Certifications

• Asp.Net Core: The Complete Guide To Build RESTful Api's, Udemy

Apr 2019

Honours (Post-grad) in Finance & Economics, University of KZN, South Africa
 Jan 2005 - Dec 2008

Skills, Technologies and Languages

• Frameworks: Flutter (mobile & desktop), Vue & Storybook, SwiftUI (minor exposure)

Languages: Dart, TypeScript, YAML

• Technologies: Flutter: BLOC, Riverpod, Provider, isolates, Codemagic, component libraries,

widget and unit tests

Vue 3: Jest/Vitest, Vite, Pinia

Mobile: Lifecycle management, secure storage, caching, dependency injection
 APIs: REST, GraphQL, OpenAPI generator, Swagger, third party integrations
 Other: Relational databases, WebSocket communication, Git, GitHub Actions

Projects

Cross-platform pharmaceutical info app (consumer) - Flutter, SQL

- Firebase authentication and SSO support
- Integrated with APIs providing medical data to assist users in getting information on side-effects and contraindications

Task management, shopping list and gallery sharing (personal use) - Flutter, Firebase

- Firebase authentication and SSO support
- Used Firestore database and file storage to create combinations of categorised items and rotating galleries

Screenshots & short demo clips available on my online CV