# Patrick Witter Full-Stack Engineer

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#### Skills

- Flutter | Dart | Bloc | Provider | Getx | Flutter Unit and Widget Testing | TypeScript | React.js
- Next.js | Redux | MUI | Tailwind | Node.js | PHP | Docker | Firebase | .NET | C# | Java | Stripe
- GraphQL | REST | SQL | No-SQL | AWS | Git, GitLab, Bitbucket, GitHub | CI/CD | Python
- Clean Architecture | MVVM | Bloc Architecture | Software/Solution Design | API Design
- Software Design | Software Testing | Object-Orientented Design | Software Modelling
- Team Leadership | Project Management | Strong Communication

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# **Cenedex Software Solutions** Los Angeles, California (Remote)

Mar 2021 - Present

#### **Team Lead**

- Implemented flutter state management using Bloc, introduced code generation tools within apps, boosting development speed by 50% and slashing average project delivery time from one year to 8 months.
- Integrated real-time biometric sensor data into flutter applications by leveraging APIs to interface with a diverse range of sensors including GPS, accelerometers, and biometric scanners.
- Implemented and automated flutter unit and widget testing through GitHub actions, increasing code coverage from 10% to 85% ensuring previous features remained functional.
- Improved poorly performing Flutter apps from previous implementations eliminating animation jank, and app crashes, reducing the average initial load from 5 seconds to 300 ms resulting in increased user retention by 120% across those apps.
- Developed pixel-perfect responsive UI across tablets and mobile devices using Flutter and implemented design features such as loading shimmers, light/dark mode, smooth animations, language switching, offline mode etc.
- Integrated technologies such as Firebase, GraphQl, RestAPI integration, Apple and Google Pay, Social Media login etc. within Flutter apps.
- Led the implementation of a robust API built with Node.js which also contains a video transcoding workflow, leveraging AWS MediaConvert, S3 bucket etc. to process and store uploaded videos.
- Led the implementation of high-performing web applications using React.js and Next.js including features such as low-bandwidth video/file upload, stripe integration, responsive UI using MUI, Tailwind, etc.
  - Sales Assist Mobile and Web: Enterprise Fintech application that allows users to create
    and upload custom advertisements using a custom video builder. They can also distribute
    these ads on platforms such as Instagram etc (includes a flutter mobile app and two
    react.js web-based admin portals). Sales Assist Demo Download the App
  - TakingFlight Mobile and Web: Healthcare application serving several hospitals in the United States. A flutter Netflix-style mobile app that allows users to watch videos uploaded by hospital administrators curated to care for their mental health while in treatment. The app supports multiple profiles for different departments, playlist management etc. Taking Flight Demo

#### Bazaar Web App

- Reported Directly to Technical Architect: Developed and integrated key functionalities for the web app using Next.js 13, React-Redux, Redux Toolkit queries, stripe etc. encompassing both frontend and backend aspects.
- Improved web vitals of the Bazaar web app reducing average page loading from 1500ms to <100ms by migrating API calls within react components to sever components in nextjs along with other optimizations (eg. image).
- Led the migration of the UI from bootstrap to tailwind reducing the bundle size of the application and decreasing the initial load from 1200ms to 200ms.
- Configured CICD pipelines using GitLab pipelines to automate the deployment process in development and production environments

# TestInvesting (Remote)

May 2022 - Apr 2023

## **Full-Stack Flutter Developer**

- Led the development of a high-performance enterprise FinTech application using Flutter using tools such as Bloc State management, MVVM architecture, and Getit service locator which aided in a maintainable and scalable code-base.
- Collaborated with designers to create pixel-perfect, responsive UI experiences and implemented custom animations for a seamless user flow.
- Engineered seamless integration with leading FinTech APIs for payment processing, banking services, and financial data analytics.
- Architected robust backend functionalities using Firebase (Firestore, Authentication, Firebase Storage) to enable secure user management, real-time data synchronization, and efficient CRUD operations.
- Streamlined data retrieval from Firestore by utilizing caching mechanisms and indexedDB, resulting in a 30% reduction in monthly billing costs.
  - <u>Test-Investing Demo</u>: A fin-tech mobile app that allows users to simulate stock market trading using real-world data to test investing skills and predictions (Please email for detailed demo)

#### Eduhub Kingston, Jamaica (Remote)

**April 2021- May 2022** 

## **FullStack Flutter Developer**

- Participated in the architectural design of the Flutter application, contributing to the selection of the Clean architecture pattern and Bloc state management. This allowed the team to specialise and increase productivity, allowing us to reach our deadline.
- Integrated design patterns within code to ensure UI responsiveness across devices. Worked closely with designers to implement pixel-perfect and responsive UI and create custom animations.
- Integrated with backend REST apis.

Eduhub Study Smart: A flutter education app that allows children to prepare for their exams with custom course work and tasks. Download the App

# **FullStack Flutter Developer**

- Participated in the architectural design of the Flutter application, contributing to the selection of the MVVM architecture pattern and ChangeNotifier Provider state management. This allowed the team to specialise and increase productivity, allowing us to reach our deadline.
- Integrated design patterns within code to ensure UI responsiveness across devices. Worked closely with designers to implement pixel-perfect and responsive UI and create custom animations.
- Built scalable APIs using PHP, specifically utilizing the Slim Framework.
- Integrated health-care analytics by creating APIs to interface with a diverse range of sensors including blood oxygen sensor data etc.
  - Sleepn Demo: A flutter health-care app that when paired with a Fitbit or Apple watch, allows users to mine crypto-currency while sleeping and doing other healthy activities. (Please email for a detailed demo)

# Karr Tax (Remote) Full-Stack Flutter Developer

**Aug 2019 - Sep 2020 (Contract)** 

- Applied software development principles to refactor the flutter codebase, implemented the MVVM architecture and utilized ChangeNotifierProvider state management in the Flutter application, which resulted in a more scalable and maintainable codebase.
- Worked closely with designers to implement pixel-perfect and responsive UI.
- Worked with Firebase and Spring to implement backend functionalities within the app, such as authentication, CRUD operations and notification integration.
- Deployed App to Google PlayStore
  - OuickFile: A fintech application that allows users to file taxes. <u>Download The App</u> (Please email for a detailed demo)

Projects(Please see Github for more)
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## Flutter FrontEnd Development

July 2021 – Present

• A Collection of UI designs that I have implemented using Flutter.

CellLang Jan 2023 - July 2023

• Built in partnership with KPMG Jamaica, a programming language users can specify formulas using regular math notation rather than using complex Excel formulas that cannot be reused across workbooks (as they are bound by specific cells). This allowed senior accounts at KMPG to specify accounting calculations one time and reuse them across workbooks.

#### Talawa Mobile Flutter App

Jan 2022 - Present

• Open-source contributor writing unit and widget testing for the application. I also resolve issues and implement requested features by the maintainers. My focus is writing widget, unit and integration tests to ensure acceptable code coverage.

 Mobile Application that allowed Pentecostal Church members to organize services remotely through the COVID-19 period. Uses Firebase, Google SignIn integration, notifications etc.. Deployed to PlayStore.

# Education and Certifications\_\_\_\_

- AWS Partner: Accreditation (Technical)
- The University of West Indies, Mona Bachelor of Science, Computer Science