Valentin VIGNAL

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⌗ GitHub   ⊕ Portfolio

PERSONAL STATEMENT

Senior Full Stack Developer with 7 years of expertise in Flutter, TypeScript, Svelte, and NestJS, committed to quality, continuous learning, and honest, results-driven communication. Skilled in crafting efficient, scalable solutions and fostering collaboration for excellence in a dynamic environment. I'm a member of the Flutter Github organization with contributor access and over 200 contributions.

TECHNOLOGY STACK

Languages:	Dart, TypeScript, Svelte, JavasScript, Kotlin, Rust, HTML+CSS, Python
Frontend Frameworks:	Flutter, ReactJS, Svelte, SvelteKit, Jetpack Compose
Backend Frameworks:	NodeJS, Express, NestJS, GraphQL, TypeORM
Platforms:	macOS, Linux, Windows
Databases:	PostgreSQL, MySQL, SQLite, Firebase
Testing frameworks:	Flutter test, Jest, Vitest, Playwright, Cypress

EXPERIENCE

Prudential plc
prudentialplc.com

Oct 2024 - Present	**Lead Software Developer** Singapore

PruServices Project

PruServices (pruaccess.prudential.com.sg) is Prudential's customer-facing application designed to help users manage their insurance policies efficiently. It provides features such as policy tracking, claims submission, premium payments, and personalized recommendations, ensuring a seamless and user-friendly experience.

Tools and technologies: Flutter, Dart, Typescript, GraphQL, NodeJS, NestJS, REST, Socket.io, MixPanel, Firebase, Sentry, Git, Bash.

- Designed and implemented the architecture and structure for Flutter projects and packages.
- Managed and maintained package dependencies and Flutter SDK versions to ensure compatibility and stability.
- Led a team of 5 developers to deliver high-quality software solutions.
- Owned and led the Design Language System (DLS) internal open-source project, serving as code owner and decision-maker while establishing consistent UI/UX standards across multiple projects.
- Mentored junior developers through code reviews and knowledge-sharing sessions, promoting continuous learning and development.
- Delivered technical training sessions and workshops on Flutter best practices and advanced development techniques.
- Established automated CI/CD pipelines to streamline testing, building, and deployment workflows.

Novade Solutions
novade.net

Sep 2022 - Oct 2024	**Senior Full Stack Developer** Singapore
Jun 2019 - Aug 2022	**Software Developer** Singapore

NovadeLite Project

NovadeLite (lite.novade.net, android, iOS) is a smart field management system for the building and construction industry. Keeping track of construction projects, assets, various kinds of forms, tasks, and managing people are some of the key features in this project.

Tools and technologies: Flutter, Dart, Typescript, PostgreSQL, SQLite, GraphQL, NodeJS, NestJS, REST, Socket.io, TypeORM, Jest, Bitrise, Firebase, Sentry, Amplitude, Stripe, Git, Bash.

- Worked as a full-stack developer (Frontend: Flutter, Backend: NodeJS, NestJS, GraphQL, REST, TypeORM, PostgreSQL).
- Executed a comprehensive restructuring of the project's mono-repo architecture using Melos, resulting in a 50% reduction in build, 10x reduction in code generation, and improved scalability.
- Achieved a 40% reduction in loading time by optimizing front-end development processes using Dart and Flutter.
- Designed and developed a code generation tool for text key localization, effectively identifying and preventing 100% of missing translation key bugs in production.
- Integrated payment and subscription features, resulting in a 50% increase in revenue within six months.
- Implemented a company wide Quality Assurance (QA) process and Continuous Integration (CI) framework, leading to a 50% decrease in bug reports and 30% faster deployment cycles.
- Established standardized protocols for code quality and consistency, resulting in a 40% decrease in code review time and increase in developer productivity.
- Overhauled the GraphQL API and PostgreSQL database, enhancing safety, relevance, and performance, resulting in a 15% decrease of the project code size.
- Code reviews and consultation on possible issues and edge cases reducing 10% of possible regression issues.
- Breaking down the user stories and estimations achieving near 100% project goals on time.
- Optimized Flutter's theme mechanism for consistent theming, and led end-to-end migration from Material Design 2 to Material Design 3.

Voluntary Work

Stack Overflow (8k+ reputation)   *Sep 2019 - Present*
stackoverflow.com/users/12066144/valentin-vignal

PyroNear   *Jan 2024 - Present*
pyronear.org

PyroNear is a complete fire risk management solution. It consists of an early wildfire detection algorithm, implemented on a microcomputer, connected to cameras positioned on high spots with a view on the forest. Our detectors communicate fire alerts to a database that is connected to a supervision platform for the fire department.

Tools and technologies: TypeScript, ReactJS, Jest

• Contributed to developing a front-end *"crowdsourcer"* app for wildfire image uploads.
• Implemented front-end tests using Jest for enhanced reliability.
• Improved user experience by refactoring routing with React Router.

Open Source Contributions

• **Flutter**   *flutter.dev*
  I am a member of the Flutter Github organization with contributor access to the repositories with over 150 contributions. My contributions to the flutter framework are mostly around the theme, testing and fixing memory leaks. I was mentioned several times [1] [2] in the Flutter notable commits.
  I am also a talker at the Flutter Singapore Meetup.
• **Go Router**   *go_router*
  I led multiple major releases and made multiple contributions to go_router and go_router_builder. Those where mostly about imperative routing and code generation.
• **Riverpod**   *riverpod.dev*
  A reactive caching and data-binding framework. (Flutter)
• **Ferry**   *ferrygraphql.com*
  A simple, powerful GraphQL Client for Flutter and Dart. (Flutter)
• **Drift**   *drift.simonbinder.eu*
  Drift is a reactive persistence library for Flutter and Dart, built on top of SQLite. (Flutter, SQLite). My work was mostly around the code generator.
• **Nestjs-query**   *nestjs-query*
  Nestjs-Query is collection of packages to make crud for graphql easier. (TypeScript, NestJS, GraphQL, PostgreSQL)

Education

• **Master degree in Computer Science**   *Jan 2019 - Jun 2020*
  National University of Singapore, Singapore
• **Master degree in Engineering**   *Sep 2016 - Jun 2020*
  CentraleSupélec, France

Personal Projects

• **animated_collection**   *pub.dev*
  A Flutter library with simple animated widgets and utilities methods to use with animations.
  Tools and technologies: Dart, Flutter

• **Padelistas**   *padelistas-app.web.app, Github*
  A flutter application to organize padel games in Singapore.
  Tools and technologies: Dart, Flutter, Firebase

• **Dart Analyze**   *dart-analyze*
  A Github action that analyzes dart code by running `dart analyze` *and* `dart format`.
  Tools and technologies: TypeScript, Dart, Flutter, Github Actions, Jest

• **My Portfolio**   *valentinvignal.github.io/portfolio*
  My portfolio website made with SvelteKit.
  Tools and technologies: Svelte, SvelteKit, TypeScript, JavaScript, DaisyUI, TailwindCSS, Playwright, Vitest

• **Chrome Markdown Emojis**   *chromewebstore.google.com*
  A TypeScript Google Chrome extension to insert emojis from their markdown code.
  Tools and technologies: TypeScript, JavaScript, Chrome Extension, ReactJS, MaterialUI, Jest