# Valentin VIGNAL

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• GitHub

**→** +65-93356456 **⊕** Portfolio

■ LinkedIn

## PERSONAL STATEMENT

Senior Full Stack Developer with 5 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.

## **TECHNOLOGY STACK**

Languages: Dart, TypeScript, Svelte, JavasScript, Rust, HTML+CSS, Python, Kotlin

Frontend Frameworks: Flutter, ReactJS, Svelte, SvelteKit

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**

Novade Solutions novade.net

Sep 2022 - Present | Senior Full Stack Developer

Singapore

Jun 2019 - Aug 2022 | Software Developer

Singapore

# **NovadeLite Project**

NovadeLite (lite.novade.net) 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.

- Work 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.

#### **EDUCATION**

 Master degree in Computer Science National University of Singapore, Singapore Jan 2019 - Jun 2020

Sep 2016 - Jun 2020

 Master degree in Engineering CentraleSupélec, France

## **VOLUNTARY WORK**

Stack Overflow

stackoverflow.com/users/12066144/valentin-vignal

Sep 2019 - Present

PyroNear pyronear.org

Jan 2024 - Present

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

Flutter is Google's SDK for crafting beautiful, fast user experiences for mobile, web, and desktop from a single codebase

• Go Router go\_router

A declarative routing package for Flutter that uses the Router API to provide a convenient, url-based API for navigating between different screens.

• 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)

• Nestjs-query nestjs-query

Nestjs-Query is collection of packages to make crud for graphql easier. (TypeScript, NestJS, GraphQL, PostgreSQL)

#### 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