CURRICULUM VITAE

Fajrian Aidil Pratama

Senior Flutter Engineer

Jakarta, Indonesia fajrianaidilp@gmail.com github.com/ryanaidilp linkedin.com/in/ryanaidilp

Experience Open source Projects Publications Education Skills

Senior Flutter Engineer with 5+ years building and scaling consumer mobile apps in fintech and healthcare. Specialized in app performance (ANR, app size, cold launch), Android/iOS integration, CI/CD and Melos monorepo tooling, with measured results: production ANR cut from 0.8% to about 0.2%, app size reduced from 80 MB to 50 MB, and CI pipeline time down ~20%. Open-source maintainer and author of Flutter architecture and tooling articles.

WORK EXPERIENCE

GoTo Indonesia, Senior Software Engineer (L3)

Feb 2025 – Present

Full time · Jakarta, Indonesia · app

- Built internal Android reliability tooling for a Flutter app, reducing production ANR rate from 0.8% to 0.17% at best and stabilizing it at 0.23% by surfacing memory leaks and StrictMode violations before release.
- Reduced release app size by almost 3 MB through R8/ProGuard keep-rule optimization, including an upstream fix to the Courier SDK that removed a blanket `-keep class androidx.**` consumer rule (androidx classes kept in a production-size app dropped from 7,797 to 4,339).
- Improved cold launch time by tracing each startup phase with Perfetto, identifying the slowest steps, and optimizing them one by one.
- Created an internal app-size analysis platform using scenario-based JSON snapshots and a Vue.js viewer to identify size contributors by module and team, enabling DFM extraction and reducing app size to 34 MB on Android and 90 MB on iOS.
- Developed a Flutter performance diagnostics plugin with DevTools and a Vue.js timeline viewer to capture battery, CPU, memory, network, thermal, and frame-timing data, reducing performance-regression triage time and contributing to a 25% app performance improvement.
- Cut GitLab CI/CD pipeline duration by ~20% in a Melos-managed Flutter monorepo by parallelizing jobs, removing redundant steps, and tuning cache behavior.
- Shipped an internal Dart CLI for MR/release automation, package registry tooling, and Mason brick scaffolding, standardizing setup across the monorepo and reducing boilerplate effort by ~80%.
- Authored asset replacement and optimization scripts that trimmed 5 MB+ from bundled assets and cut cross-package asset-update effort by ~80%.

Flutter, Dart, Android, iOS, GitLab, BLoC, RESTful API, Fintech, Python, Google ML Kit, Firebase, TensorFlow, Figma, Postman, One Signal, AutoRoute, GetIt, Injectable, Build Runner, Freezed, JSON Serializable, Perfetto, R8/ProGuard

Reku, Senior Flutter Engineer

Nov 2023 – Feb 2025

Full time · Jakarta, Indonesia · app

- Led a full Flutter app rewrite using modular clean architecture and Melos, enabling parallel development across teams and improving codebase structure for ongoing feature work.
- Reduced application size from 80 MB to 50 MB by removing unused assets, refactoring build configuration, and enforcing size discipline across the Flutter app.
- Standardized feature scaffolding with Mason to reduce boilerplate work and improve consistency across new features.
- Mentored junior and mid-level Flutter engineers through reviews and architecture sessions, accelerating onboarding and improving code quality across the team.
- Initiated a design system that standardized UI components and theming, reducing UI inconsistency and duplicated component work across the app.

Flutter, Dart, Android, iOS, GitLab, BLoC, RESTful API, Crypto, Web3, Google ML Kit, Firebase, TensorFlow, Figma, Postman, One Signal, AutoRoute, GetIt, Injectable, Build Runner, Freezed, JSON Serializable

Stockbit / Bibit.id, Senior Flutter Engineer

Nov 2022 – Nov 2023

Full time · Jakarta, Indonesia · app

- Owned Flutter feature development across onboarding, profile, and investment discovery flows in a high-traffic fintech app, with emphasis on reliability and maintainability.
- Improved the KYC flow by integrating OCR and implementing caching to increase submission success rates under unstable network conditions.
- Refactored complex UI flows by reducing nested BLoC builders, improving widget modularity and lowering maintenance overhead for future feature changes.
- Contributed to internal Flutter packages focused on secure storage, caching, and shared infrastructure.

Caretaker.id, Flutter Developer

Sep 2022 – Nov 2022

Freelance · Jakarta, Indonesia · app

- Built a Flutter-based appointment and teleconsultation app and contributed to a reported 60% sales increase by improving booking and consultation flows.
- Set up Bitrise CI/CD pipelines to automate Android and iOS deployments, reducing manual release effort and deployment errors.
- Implemented pixel-accurate Flutter UI from Figma and integrated backend APIs end-to-end.

Detexi.id, Flutter Developer

Jul 2022 – Sep 2022

Freelance · Palu, Indonesia · app

- Built a Flutter app for healthcare partners to manage daily operational workflows, improving reliability and usability for medical staff.
- Contributed to significant sales growth (reported ~80%) by improving onboarding and usability for medical professionals.
- Delivered responsive and accessible Flutter interfaces in close collaboration with UI/UX designers.

Sikerja.id, Flutter Developer

Apr 2022 – Jul 2022

Freelance · Palu, Indonesia · app

- Built and launched a regional job platform serving thousands of users across Sulawesi.
- Implemented employer–candidate matching flows tailored for underserved regional markets.

UPSTREAM OPEN SOURCE CONTRIBUTIONS

- **gojek/courier-flutter** **(https://github.com/gojek/courier-flutter/pull/31)**: Courier SDK update that cut kept androidx classes from 7,797 to 4,339 and fixed a post-login NoSuchMethodError crash.

- **Baseflow/flutter-permission-handler** (https://github.com/Baseflow/flutter-permission-handler/pull/1566): Fixed a double completionHandler call behind a top production crash on iOS.
- **flutter_file_picker** (https://github.com/vicajilau/flutter_file_picker/pull/2105): Removed the ~300 KB Apache Tika dependency from the Android implementation.
- **petercinibulk/envied** (https://github.com/petercinibulk/envied/pull/42): Merged: automatic CONSTANT_CASE conversion for environment variable names (docs in PR 74).
- **drogel/keyboard_attachable** (https://github.com/drogel/keyboard_attachable/pull/35): Open PR: fixes the footer not attaching to the keyboard on some devices (merged earlier: PR 31, Gradle and manifest compatibility).
- **dio** (https://github.com/cfug/dio/pull/2611): Open PR: guard against duplicate handler completion.

PROJECTS

- **Archipelago (Flutter monorepo starter kit)** (https://archipelago.banuacoder.com/): Licensed Flutter monorepo starter kit built by Banua Coder: modular architecture, CLI scaffolding, and Mason bricks that generate production-ready apps.
- **ANR WatchDog (Android)** (https://github.com/ryanaidilp/ANR-WatchDog): Maintainer of an actively maintained fork after the original project became inactive. Ported and integrated a Flutter-compatible version used internally at GoPay as part of its ANR tracking and diagnostics tooling.
- **Form Gear (Questionnaire Engine)** (https://github.com/ryanaidilp/form-gear): Maintains a modernized fork of BPS Indonesia's Form Gear questionnaire engine, originally developed to replace pen-and-paper surveys and overcome limitations of ODK Collect. Refactored and updated the codebase for better performance and maintainability; contributed design and architectural changes documented in a public pull request (https://github.com/ryanaidilp/form-gear/pull/1).
- **Form Gear Builder** (https://github.com/IPDS-59/form-gear-builder): Web-based questionnaire and validation rule builder that enables non-technical users to configure complex survey logic without code changes, with a web interface and a Flutter SDK for runtime integration. Live demo (https://form-gear-builder.netlify.app/).
- **Form Gear Flutter SDK** (https://pub.dev/packages/form_gear_engine_sdk): Flutter SDK for integrating the Form Gear engine, supporting JSON-based questionnaire configuration and runtime execution.
- **BPS SSO Flutter SDK** (https://pub.dev/packages/bps_sso_sdk): Flutter SDK enabling third-party apps to integrate with Indonesia's BPS Single Sign-On, reducing authentication integration effort for external teams.
- **Archipelago CLI** (https://pub.dev/packages/archipelago_cli): CLI toolkit that accelerates modular Flutter monorepo development by automating scaffolding and enforcing project consistency. Part of Archipelago (https://archipelago.banuacoder.com/), a licensed Flutter monorepo starter kit built by Banua Coder.
- **Banua Coder Reusable GitHub Workflow** (https://github.com/banua-coder/banua-coder-workflow): Reusable GitHub Actions workflow used across multiple projects to enforce sanity checks (app size, code quality), run linters, generate changelogs, manage releases and tags, handle back-merges, clean up branches, and automate version bumping.
- **Ayana (SaaS)** (https://ayana.banuacoder.com): Pregnancy tracking SaaS built with Laravel and Vue.js, reaching 528 users within the first month of launch.
- **PICO Sulteng** (https://banuacoders.com/corona/): COVID-19 monitoring dashboard used by Central Sulawesi authorities and the public, with a mobile app (https://banuacoders.com/app/pico/) (source (https://github.com/ryanaidilp/PICO_SULTENG_FLUTTER)).
- **stadata_flutter_sdk** (https://pub.dev/packages/stadata_flutter_sdk): Flutter SDK for Badan Pusat Statistik (BPS) Indonesia's official API, with access to publications, press releases, and tables.

PUBLICATIONS

- Migrating from GetX: Boosting Flutter App Development Efficiency, Part 1: Architecture and Folder (https://medium.com/@ryanaidilp/migrating-from-getx-boosting-flutter-app-development-efficiency-part-1-1a33fd44a3a9)

- Migrating from GetX: Boosting Flutter App Development Efficiency, Part 2: Routing (https://medium.com/@ryanaidilp/migrating-from-getx-boosting-flutter-app-development-efficiency-part-2-routing-c146a09bc5fa)
- Migrating from GetX: Boosting Flutter App Development Efficiency, Part 3: Dependency Injection (https://medium.com/@ryanaidilp/migrating-from-getx-boosting-flutter-app-development-efficiency-part-3-dependency-injection-50693e8fed2e)
- Flutter UI Kit Package Development: Introduction (https://medium.com/@ryanaidilp/flutter-ui-kit-package-development-introduction-9edbd4413dcb)
- Streamlining Flutter Development with Mason and BrickHub (https://medium.com/@ryanaidilp/streamlining-flutter-development-with-mason-and-brickhub-21c5020e9761)
- Efficient Flutter Workflow: Melos, Auto Route, DI, Slang & Mason

EDUCATION

B.Sc. in Applied Statistics & Computational Statistics, Politeknik Statistika STIS, Jakarta

2017 – 2021
Focus: Computational Statistics (Information System)

SKILLS

Languages	Dart, Swift, Kotlin, TypeScript, JavaScript, Java, Go, PHP
Frameworks & platforms	Flutter, Android, iOS, Vue.js, Node.js
Tools & infrastructure	GitLab CI/CD, GitHub Actions, Bitrise, CodeMagic, Mason, Melos, Firebase, MySQL, PostgreSQL, Git, Perfetto, R8/ProGuard
Other	Data structures and algorithms, technical writing, open-source maintenance
Spoken languages	English (B2 CEFR), Indonesian (native / bilingual proficiency)