



Mike Matiunin

Flutter Lead Software Engineer

📍 Batumi, Georgia
☎️ +995 598 70 69 98
✉️ plugfox@gmail.com

🌐 PlugFox.dev
🔗 t.me/PlugFox
🔗 github.com/PlugFox

🌐 linkedin.com/in/PlugFox
🗣️ PlugFox#7967
🌐 pub.dev/publishers/plugfox.dev

About

I am **Mikhail Matiunin**, a dynamic and highly skilled software engineer specializing in **Dart** and **Flutter**. With a proven track record of leading teams and successfully delivering full-stack projects, I bring a wealth of expertise to any organization. In addition to my passion for programming and staying abreast of the latest technological advancements, I also have a keen interest in cutting-edge gadgets and embarking on thrilling motorcycle adventures.

As a dedicated advocate of transhumanism, I am driven by the belief that technology has the power to alleviate human suffering and create a more harmonious world. Committed to maintaining a healthy lifestyle and devoid of any detrimental habits, I am fully focused on my professional growth.

Looking ahead, my ultimate goal is to contribute to groundbreaking projects and initiatives that push the boundaries of technology, leaving a lasting impact on society and the global community. For example, it would be great to participate in projects on the development of prosthetics and augmentation.

I have been working with **Flutter** since its inception in late 2017. My expertise in Flutter and Dart is profound and deeply rooted. Beyond Flutter, my experience extends to **AngularDart** and **Dart's backend** capabilities, including crafting FaaS services and comprehensive service solutions.

I'm an active contributor to the **Open Source** community, embodying the ethos of sharing and collaborative development. My skill set encompasses the full spectrum of engineering roles, including **DevOps**. I dedicate substantial time to holistic growth in **Computer Science** and **R&D**, focusing on architectural considerations, design patterns, clean code practices, algorithms, and data structures.

With my ability to engage effectively with the community and lead a team of engineers, I bring a holistic approach to problem-solving and project execution.

Leadership Skills

I possess strong leadership qualities and have a proven track record of effectively leading teams. I have managed teams ranging from 3 to 7 engineers in past roles. Beyond team leadership, I am actively engaged in the broader developer community: I maintain a blog featuring technical articles, regularly participate in meetups, feature in podcasts, and once a month, produce a video tutorial tackling a complex and non-trivial topic for the benefit of the community.

Dart

While I'm well-versed in multiple programming languages, **Dart** unquestionably holds a special place in my heart. I have mastered every facet of the **Dart** language, leveraging its features to produce optimal results. My proficiency extends to **Object-Oriented Programming**, particularly emphasizing utilizing mixins for multiple inheritance. I'm adept at using modifiers like "**meta**" and "**pragma**", as well as embracing the latest class modifiers.

I meticulously ensure that my code aligns with Google's **best practices** and **coding styles**, aiming for impeccable conformance. I possess an in-depth understanding of topics like **Isolate**, **Event Loop**, **Zone**, and **Async**, which equips me to implement **concurrency solutions** of varying complexity. This includes intricate tasks like establishing two-way communication in isolates and striking a balance between isolates and web workers in web applications.

Reactive programming is my second nature; I'm comfortable working with everything from **Iterable** and **Stream** to advanced tools like generators, **StreamIterator**, and **StreamTransformer**. My vast backend communication expertise covers a spectrum of protocols and transports such as **RESTful**, **GraphQL**, **WebSocket**, **gRPC**, and **Centrifuge**.

Code generation, including direct interactions with the **Analyzer**, falls within my capabilities. I can seamlessly integrate modules written in other languages using **FFI** and **JS Interops**. My toolkit also includes experience in **cryptography**. I actively employ profiling and debugging using **DevTools** to ensure performance and resolve issues.

Flutter

In the realm of Flutter, I possess a comprehensive suite of skills and knowledge:

- 🕒 **Adaptive Layouts:** Crafting responsive layouts tailored for various device sizes.
- 🕒 **Internationalization & Theming:** Implementing localization, themes, and ensuring accessibility for a diverse user base. Creating and extending themes.
- 🕒 **Initialization & Dependency Management:** Mastering phased initialization and adeptly managing dependencies.
- 🕒 **Cross-platform Development:** Skilled in creating applications that span across mobile, desktop, and web platforms.
- 🕒 **Navigation and Routing:** Implementing declarative navigation, including nested, dynamic, deep linking, and platform synchronization using the Router. I have my own solution for declarative routing.
- 🕒 **Architectural Mastery:** I architect applications with layered structures, keeping logic distinct from widgets, utilizing state machines, both custom and based on the BLoC pattern. My applications are always based on the principles of multi-tier architecture.
- 🕒 **Framework Internals:** Profound knowledge of the framework's intricacies, from widgets and bindings to scene construction.
- 🕒 **Monitoring & Analytics:** Integrating analytics and monitoring tools like Sentry, Crashlytics, and Performance Monitor.
- 🕒 **Native Plugins:** Capable of both developing new native plugins and refining existing ones, such as those for camera operations, often transcending Dart to implement functionalities in other programming languages.
- 🕒 **GLSL Shaders:** Designing custom GLSL shaders for GPU level element rendering.
- 🕒 **Animations:** Employing a range from straightforward predefined animations to advanced staggered animations.
- 🕒 **Complex Compositions:** Crafting intricate compositions using tools like Overlay, Sliver Protocol, or dynamically adjusting layouts based on content dimensions. Using widgets like Flow and CustomMultiChildLayout.
- 🕒 **Optimization & Debugging:** Proficient in nuances like RepaintBoundary and the inner workings of various widgets.
- 🕒 **Testing:** Writing both Unit, Widget and Integration tests to ensure application stability and performance.
- 🕒 **Flutter Engine Interactions:** Able to interface between multiple Flutter engines, such as for developing a Foreground Service on Android.

DevOps

I possess foundational knowledge in DevOps and demonstrate proficiency in several key areas:

- 🕒 **Containerization:** Skilled in using Docker, capable of creating custom container images tailored to specific project requirements. Orchestration: Confidently deploy Kubernetes and Docker Swarm setups from scratch, ensuring robust, scalable, and efficient infrastructure management.
- 🕒 **CI/CD Implementation:** Repeatedly set up and optimized Continuous Integration and Continuous Deployment pipelines using tools such as GitHub Actions, GitLab CI, Jenkins, and Fastlane.
- 🕒 **Cloud Integration:** Seamlessly integrate with various cloud providers, streamlining application deployments and monitoring.
- 🕒 **Tool Proficiency:** Familiar with a broad suite of DevOps and collaboration tools, including but not limited to Docker, Kubernetes, Rancher, Portainer, JIRA, Slack, Prometheus, Confluence, Grafana, Sentry, n8n, Centrifugo, PostgreSQL, MySQL, InfluxDB, Redis, and MongoDB.
- 🕒 **Networking Expertise:** I thoroughly understand the OSI network model, which underpins my ability to configure and manage sophisticated network equipment. With hands-on experience with advanced networking devices such as MikroTik, I am adept at setting up and tuning firewalls to ensure optimal security and network performance.

Databases

I possess robust knowledge and hands-on experience with SQL-based RDBMS, notably PostgreSQL, MySQL, and SQLite. My core competencies in database management include the following:

- 🕒 **Migration Management:** Designing and implementing database migrations to accommodate evolving application needs.
- 🕒 **Complex Queries:** Crafting intricate, staged queries with multiple joins, ensuring data retrieval is both accurate and efficient.
- 🕒 **Indexing & Selectivity Insight:** A deep understanding of indexing strategies combined with a knack for leveraging selectivity, ensuring optimal query performance.
- 🕒 **Advanced SQL Features:** I adeptly harness advanced database functionalities, such as Constraints, Triggers, Foreign keys, and Generated columns, and expertly manage JSON data within relational databases.

Work Experience

Flutter Lead Software Engineer

Audo.com

Jan 2024 - Oct 2024 · 10 mos

United States · Remote

Developing a web application for career management, resume creation and interview preparation using an AI assistant.

Some of my contributions to the project:

- Creation of screens for filling, editing, viewing, downloading PDF resumes, with the ability to format, select templates, colors, fonts, etc.
- Created career selection screens with an interactive tree.
- Unified and created a separate package with a theme and typical application widgets.
- Rewrote everything related to actions and CI/CD pipeline.
- Developed various interactive, animated components and charts with CustomPainter and Shaders.
- Wrote a module for capturing and streaming audio and video on the web, as well as for speech recognition for Interview Preparation.
- I have significantly increased the speed of the application, optimized rasterization, and also the speed of loading the application.
- Implemented and configured sentry to track errors and problems in the application.
- Conducted major refactoring.

Flutter Lead Software Engineer

Giraffic (Vexus.io)

Jan 2023 - Aug 2023 · 8 mos

Israel · Remote

As a lead developer, I guided a team of 5 Flutter developers to create a cross-platform distributed file storage service based on distributed blockchain storage technology, compatible with Windows, macOS, Linux, Android, iOS, and an experimental web version. A significant focus was on cryptography, ensuring the client encrypted all files and data. We integrated comprehensive tests and utilized FFI for seamless integration with C++ code.

Flutter Team Lead

Digitally Inspired Ltd

May 2022 - Jan 2023 · 9 mos

Ukraine · Remote

Creation of a mobile application for the English company "City Plumbing". Management of technical aspects of development, implementation of new practices, architecture, and team management.

Senior Flutter developer, Tech Lead

OZON.ru

Jul 2020 - May 2022 · 1 yr 11 mos

Moscow, Russia · Hybrid

Creation of a cross-platform marketplace truck drivers application for use internally within the company. Transportation Management department.

Lead Software Engineer

Redmadrobot

Jun 2018 - Jul 2020 · 2 yrs 2 mos

Moscow, Russia · Hybrid

Internal automation of a mobile application development company. Automation of HR, Accounting, Finance departments.

Software Engineer

Montblanc & Gebau Kunststoff

Jun 2012 - Jun 2018 · 6 yrs 1 mo

Moscow, Russia · On-site

Internal automation of a plastic profile manufacturing company. Automation of a manufacturing enterprise, service, IT department, HR, Accounting, Finance.

Achievements

Boasting a portfolio of over 50 articles and public speaking engagements, some of my notable contributions include:

- 👉 Business Logic Component (4-part series)
- 👉 Mastering Isolates in Flutter & Dart
- 👉 Flutter Developer Roadmap
- 👉 Server-side application with Dart
- 👉 Flutter application testing
- 👉 Infrastructure Security for Flutter Development
- 👉 The concept of a new routing, Router, Navigator 2.0
- 👉 Widgets, Context, State, Keys
- 👉 Event Loop and Isolates Flutter Application Architecture
- 👉 Flutter: Custom Painter
- 👉 WebSockets and Full duplex connection

Open Source

Flutter Plus • github.com/PlugFox/flutter-plus

Extension, add some useful commands to Flutter development in Visual Studio Code.

WS • pub.dev/packages/ws

WS: A compact, highly efficient WebSocket library. Easily establish, manage, and reconnect WebSocket connections in real-time apps.

Octopus • pub.dev/packages/octopus

A cross-platform declarative router for Flutter with a focus on state and nested navigation.

Spinify • pub.dev/packages/spinify

Dart (Flutter) client SDK for bidirectional communication with Centrifugo and Centrifuge-based server over WebSocket.

Control • pub.dev/packages/control

Simple state management for Flutter with concurrency support.

docker_flutter • hub.docker.com/r/plugfox/flutter

Alpine Linux images for Flutter & Dart with helpful utils and web build support.

platform_info • pub.dev/packages/platform_info

Contains info about the current platform, such as Build mode and Operating system.

L (logger) • pub.dev/packages/l

Cross-platform html/io [L]ogger with simple API

Multiline • pub.dev/packages/multiline

Provides convenient access to multiline String records with method extensions.

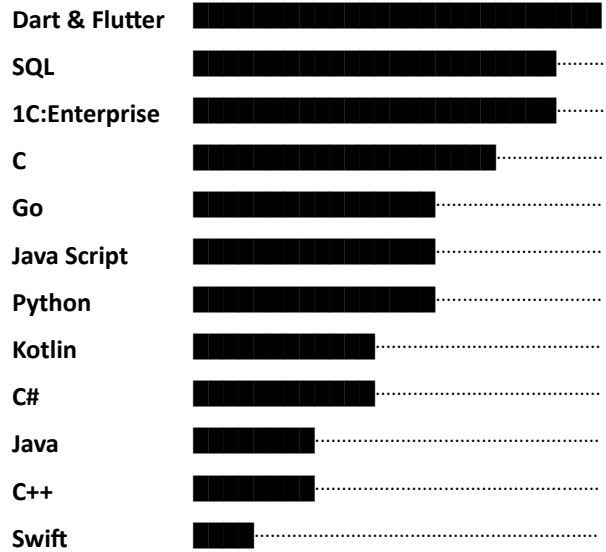
Pubspec Gen • pub.dev/packages/pubspec_generator

Code generator `pubspec.yaml.g.dart` from `pubspec.yaml`

XOR Cipher • pub.dev/packages/xor_cipher

The XOR Encryption algorithm is an effective and easy-to-implement method of symmetric encryption.

Programming languages









Spoken languages

Russian	Native
English	Professional

Strengths

- «Self reflection» «Strong coding» «Networking»
- «Public speaking» «Problem-solving abilities»
- «Responsibility» «Expertise in Flutter»
- «Technical proficiency» «Full stack»

Hobbies

 Motorcycles	 Gadgets	 Music
 Computer science	 Films	 Open Source