

# Johan J. Tamayo

Startup Agility | Product and Impact Focused | AI-Driven Development

+1 (206) 929 3200 @ johanjtamayo@gmail.com <https://johan-tamayo.vercel.app> <https://github.com/johan-tamayo>

Seattle, WA 98121

## SUMMARY

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Full Stack Engineer with 6 years of experience across drone delivery, fintech, and consumer tech — shipping mission-critical products at high-growth startups and big tech. Built drone operation software at Matternet, a GRC compliance platform at Themis, and Messenger Kids at Meta. Known for bridging strong frontend and backend engineering with a startup mindset — moving fast, owning outcomes, and staying at the forefront of emerging technologies, including GIS, LLMs, and real-time data pipelines.

### Key Skills:

Javascript / Typescript | React / Next.js | Express.js / Nest.js | Python / FastAPI | Go | PostgreSQL / MongoDB

## EXPERIENCE

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### Senior Software Engineer

#### Matternet

02/2024 - Present Mountain View, United States (Remote)

<https://www.matternet.com/>

#### Built Mission Control System and Fleet Management Software for the world's first FAA Type-Certified urban drone delivery platform, supporting real-time autonomous drone operations.

- Built frontend applications with optimized UI/UX using **React, Typescript, Next.js, React Native, Expo, TailwindCSS**, and **ShadCN** with **Tanstack Query**, and **Zustand** for state management, delivering real-time telemetry dashboards, delivery scheduling, and multi-hub monitoring.
- Integrated **Mapbox** and **CeismJS** for 2D/3D geospatial visualization of live drone positions, flight paths, and geofences - and built a 3D aviation data visualization platform connected to ML pipelines to accelerate autopilot system development.
- Migrated real-time drone telemetry pipelines using **MQTT/HiveMQ, Kafka**, and **PostgreSQL** processing ~1200 events/s, reducing end-to-end ingestion latency by ~70%.
- Integrated **GraphQL/Hasura** layer over **PostgreSQL**, improving query throughput by ~65% and eliminating protobuf coupling bottlenecks across client applications.
- Enforced **RBAC** with row-and column-level permissions across operator, partner, and admin roles, reducing unauthorized data exposure surface by ~80%.
- Built backend microservices for flight operations and delivery orchestration using **Typescript, Python**, and **Go** on **AWS**, infrastructure managed via Terraform.
- Utilized **AWS SQS/SNS, Twilio APIs** to architect a real-time notification system for flight status and delivery lifecycle events and integrated **PostHog** for product analytics and feature flag-based rollouts.
- Authored agent rules for **Cursor, Claude Code**, and **Codex** into the centralized repo to standardize AI-assisted development, driving the adoption of an AI-driven engineering culture.
- Established **CI/CD pipelines** with **GitHub Actions** and **Terraform**, and wrote automated tests using **Jest, Pytest**, and **Playwright**, maintaining 70%+ coverage across critical flight operation features.
- **Mentored 3 junior engineers** through code reviews and architectural guidance, and joined the **on-call rotation** to ensure 24/7 reliability of production drone delivery systems.

# EXPERIENCE

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## Senior Full Stack Engineer

### Themis

📅 12/2021 - 02/2024 📍 New York, United States (Hybrid)

🔗 <https://www.themis.com/>

**Joined as an early engineer to build a B2B GRC SaaS platform for banks and fintech. Built core modules for managing the documents, issues, and monitoring from the ground up.**

- Built interactive UIs for core modules using **React**, **Typescript** and **Next.js** with **Redux**, **Redux Toolkit Query**, and **TanStack Query** for state management - cutting onboarding time by ~30% and UI load time by ~25%.
- Built and maintained a reusable component library supporting different themes for **multi-tenant application** - including complex data tables and dashboards using **React**, **Mantine**, **TailwindCSS**, **Ag-Grid**, and **Apache ECharts**, documented in **Storybook** - reducing frontend development time by ~40% and ensuring UI consistency across core modules.
- Developed **RESTful** backend APIs and an **RBAC** service using **Node.js**, **Ruby on Rails**, and **PostgreSQL**, supporting audit trails, issue escalation, document versioning, and fine-grained permission across 40+ enterprise clients.
- Integrated **LLM providers (OpenAI, Anthropic)** via **Node.js** middleware to automate regulatory document summarization and issue classification, reducing manual review overhead for compliance teams.
- Designed **CI/CD pipelines** using **CircleCI** and **GitHub Actions** to deploy on **Google Cloud Platform** via **Docker**, and wrote down automated tests using **Jest**, **RSpec** and **Cypress** with 50+% coverage.
- Integrated **Stripe APIs** to build subscription billing and payment workflows,, supporting tiered SaaS pricing across 40+ enterprise clients.
- Wrote down the **automated testing** scripts using **Jest**, **RSpec** for unit testing, and **Playwright** for E2E testing, providing coverage over 70%.
- Collaborated with compliance domain experts, designers, and PMs in **agile** environment to ship and iterate on features at a fast speed.

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## Frontend Engineer

### Meta

📅 01/2020 - 12/2021 📍 New York, United States (On-Site)

🔗 <https://messengerkids.com/>

**Contributed to the frontend development of Messenger Kids, Meta's child-safe messaging app for users under 13, as part of a cross-functional product team.**

- Developed and maintained **React Native** UI components, including sticker packs, GIF support, and kid-friendly AR filters for video chat.
- Built parental control features such as contact management and message monitoring screens using **React**, **Typescript** and **GraphQL**.
- Implemented screen time limit flows and notification UIs aligned with **COPPA compliance** requirements.
- Utilized the **Messenger Design System (MDS)** to build consistent, accessible UI components in line with Meta's internal design standards and component library.
- Collaborated with designers and backend engineers to ship iterative feature updates through Meta's internal deployment pipeline.
- Participated in code reviews and **A/B testing** to improve UI quality and app performance.

# EDUCATION

M.S. in Computer Science

**Columbia University**

📅 2019 - 2020 📍 New York, United States

GPA  
**3.9** / 4.0

B.S. in Computer Science

**The City College of New York (CCNY)**

📅 2017 - 2019 📍 New York, United States

GPA  
**3.9** / 4.0

A.S. in Computer Science

**Borough of Manhattan Community College (BMCC)**

📅 2015 - 2017 📍 New York, United States

GPA  
**4.0** / 4.0

# SKILLS

## Languages

HTML / CSS Javascript Typescript Python Go Ruby

## Frontend

React Next.js Remix Vue3 React Native Expo Electron.js Tailwind CSS ShadCN

Mantine Storybook Redux Zustand Mapbox Apache ECharts Chart.js TanStack/Query

Ag-Grid

## Backend

Node.js Express.js Nest.js FastAPI Django RESTful APIs GraphQL PostgreSQL

MongoDB Redis Shopify Microservice NX Prisma SQLAlchemy

## AI & LLM

OpenAI Anthropic LangChain Vector DB Vertex AI

## Infrastructure

AWS GCP Kafka RabbitMQ ElasticSearch Supabase Firebase Docker Kubernetes

GitHub Actions CircleCI Jenkins DataDog PostHog

## Testing / Observability

Jest Playwright Cypress Pytest RSpec BrowserStack