Novel Bafagih

Software Engineer

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Software engineer who builds products end to end, from design to backend. Founding frontend engineer on AgentFlow, an AI document platform for banks and credit unions, which I took from its first commit to more than a hundred client users a week. I use AI coding agents to move fast, and I test and own everything that ships.

SKILLS

Languages: TypeScript, JavaScript, Python, Kotlin, Rust, SQL, Java, PHP

Frontend: React, Next.js, Tailwind CSS, Storybook, Vue, Angular, HTML, CSS

Backend and data: FastAPI, Supabase, PostgreSQL, SQLite, Django REST Framework, Sanity, Turso

Mobile and desktop: Android, Jetpack Compose, Tauri

AI: LLM product features, AI coding agents, MCP

Tools: Git, Playwright, PostHog, Figma, Vercel, Docker, Google Cloud

EXPERIENCE

Multimodal – New York, United States (remote)

Software Engineer *Apr 2024 – Present*

- Founding frontend engineer on AgentFlow, an AI platform that takes business documents from upload to decision for banks and credit unions: wrote its first frontend commit and built its core screens as it grew from zero to more than a hundred client users every week.
- Cut a US mortgage lender's loan processing costs by 80% by building the document annotation tool its team checks the AI's work in, making annotation 50% faster.
- Cut CPU use from 100% to 10% when scrolling fast through long PDFs, keeping the document viewer smooth for reviewers who live in it all day.
- Migrated multimodal.dev from Webflow to Next.js and Sanity with no lost pages or broken sign-ups, then raised its median mobile Lighthouse score from 73 to 85 and made pages about 40% lighter.
- Led the design-system consolidation across the app: replaced hundreds of one-off colours, sizes and status styles (33 status-to-colour maps down to one) with shared tokens and components, guarded by a lint rule that blocks new one-offs.

  Tech: React, Next.js, TypeScript, Tailwind CSS, Storybook, TanStack Query, Python, FastAPI, Sanity, PostHog, Playwright

OrthoCoPilot, by TUM Venture Labs – Munich, Germany (remote)

Web Developer *Mar 2023 – Jun 2024*

A digital-health startup from the Technical University of Munich (TUM), building tools for orthopaedic patients and doctors.

- Led development of TIA, a pilot web app with TUM Venture Labs and TUM Sports Orthopedics that connected 500+ patients with their doctors before consultations.
- Encoded 100+ branching medical questions into the app, so each patient's questionnaire adapts to their answers and the doctor gets a readable summary.
- Designed and built the backend on Supabase and PostgreSQL.

  Tech: React, JavaScript, Material UI, Supabase, PostgreSQL, Figma

Upwork – Remote

Frontend Engineer, Freelance *Jan 2023 – Mar 2024*

- Delivered web projects for 5+ clients in several countries; half of them came back for repeat work.
- Built a Next.js web app on the OpenAI API for Ignite Compliance, a US client, deployed it to Google Cloud Run from GitHub, and fixed the payment issues that blocked its users.

  Tech: React, Next.js, JavaScript, OpenAI API, Google Cloud Run

Udana.id – Jakarta, Indonesia

Frontend Developer *Nov 2021 – Mar 2022*

- Part of the small team that took a fintech product through verification by OJK, Indonesia's Financial Services Authority.
- Built the 5+ page responsive website that presents the product in AngularJS, from its main pages to the interface components they share.

  Tech: AngularJS, JavaScript, HTML, CSS

PROJECTS

Payroll Formatter
Freelance developer, Client project *Mar 2025*

- Cut a company group's tax-upload preparation from 2–3 days of manual database lookups across its sub-companies to minutes, with a Windows tool that reads the legacy Access payroll and writes Indonesia's e-Bupot files.
- Cost the client 99% less than a year on the vendor's replacement platform, and the client owns the code.

  Tech: Python, Tkinter, MS Access, pyodbc, openpyxl, PyInstaller

Raya Airways cargo portal – Through Belli
Frontend Engineer, Contract *Apr – May 2025*

- Built the flight schedule customers book cargo from, on Belli's white-label air-cargo platform, and tightened the booking form.

  Tech: Next.js, TypeScript, shadcn/ui, TanStack Table, React Hook Form, Clerk

Bank Sampah
Designer and developer, Side project *Mar – Sep 2026*

- Designed and built the offline desktop app a neighbourhood waste bank runs on, cutting its twice-yearly payout from weeks of going page by page through spreadsheets, with prices changing every collection, to seconds.
- 7.4+ tonnes of waste weighed in through it from 152 residents so far.

  Tech: Tauri, Rust, React, TypeScript, SQLite, Tailwind CSS

Pethub
Android developer, Freelance *Nov 2023*

- Shipped Pethub's Android app, 10+ screens, to Google Play, after restructuring its code to MVVM with Hilt and Retrofit.

  Tech: Kotlin, Android, MVVM, Hilt, Retrofit

SIDAKU
Android and API developer, Thesis *Sep 2023 – Jul 2024*

- Built an Android app and REST API that let Kota Batu's small businesses register with the city's business-service centre and keep 12 kinds of their own records.

  Tech: Kotlin, Jetpack Compose, Retrofit, Django REST Framework, PostgreSQL, Docker, Cloud Run

EDUCATION

Universitas Brawijaya – Malang, Indonesia
Bachelor of Computer Science, Information Technology *2020 – 2024*

- Chairman of FEEL-IT (2022), the orientation that KBMTI, the IT students' association, runs for 150+ new students: led a team of 60 across 8 divisions and brought it back offline for the first time in two years.
- Head of Talent Development at BCC, the faculty's student tech community (2021 – 2023): set up its software house, which won the community's first paid project, and ran its first offline townhall, with attendance up 50%.

Bangkit Academy, led by Google, Gojek, Tokopedia and Traveloka | Certificate
Mobile Development (Android) cohort *Feb – Jul 2023*

- Graduated with distinction, in the top 10% of the cohort.
- Led the capstone team of six across mobile, machine learning and cloud to a working Android app in a month, closing 100+ tasks in 30 days.

AWARDS AND CERTIFICATIONS

Informatics Festival 2022, Universitas Padjadjaran | Certificate
3rd place, Innovative Technology Competition *Sep 2022*