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Experience

Tudo Tech Lab

Sep 2024 – Present

Senior Full Stack Developer

- Architecting **TudoNum** (live at tudonum.app), a multi-service super app spanning professional services, ride-hailing, logistics, and deliveries — Python/Django REST back end and React + Vite front end maintained as independent codebases.
- Shipped the end-to-end **Professional Services** module: vendor onboarding, multi-tier role-based access control with in-app role switching (customer / vendor / admin), city- and country-scoped service discovery, calendar-driven booking and survey scheduling, real-time availability and conflict detection across provider calendars, and wallet-backed checkout.
- Designed a schema-driven (“DNA”) dynamic form engine — a single JSON configuration drives React to render complex, multi-step forms from a shared UI primitive library, enabling hundreds of distinct vendor and service flows to be spun up without writing new components. Reused the same engine for the **Company Onboarding** pipeline: document collection, verification workflows, KYC checks, and admin approval state machines for corporate vendors.
- Integrated multi-region payment rails — Stripe for international cards plus local gateways (WalPay and regional partners) covering Oman, Portugal, and Pakistan — alongside an internal wallet ledger handling top-ups, transfers, and provider payouts.
- Built an AI-powered admin panel layered on the Claude Code, OpenAI, and OpenRouter SDKs for automated triage, content generation, and operational tooling; integrated transactional SMTP and webhook handlers for invitations, verification, and payment events.
- Own production infrastructure end-to-end: front end on Vercel, Django back end on AWS, with CI/CD pipelines, environment management, and zero-downtime release workflows.

Stack: Python, Django, Django REST Framework, React, Vite, PostgreSQL, Stripe, WalPay, AWS, Vercel, Claude SDK, OpenAI, OpenRouter, SMTP

Future Tech Technologies

Jun 2024 – Aug 2024

Senior Software Engineer & Team Lead

- Led a 5-member team delivering Astro & React web applications with Tailwind CSS.
- Architected Express/Prisma backends and enforced SQL data integrity across multiple services.
- Implemented monitoring and end-to-end tests, achieving zero-downtime deployments.

Stack: Astro, React, Next.js, Node.js, Prisma, Tailwind CSS

Freelancer

Apr 2024 – Jun 2024

Full Stack Developer

- Delivered 10+ client projects spanning Astro, React, Next.js, and Flutter.
- Managed end-to-end project scoping, client communication, and junior developer mentoring.
- Automated deployment workflows and maintained code quality across multiple platforms.

Stack: Flutter, React, Next.js, Node.js, Supabase, MongoDB, Convex

Daxno Technology

Dec 2023 – Apr 2024

Flutter Developer

- Built production-grade Android applications with Flutter & Firebase.
- Developed automated test suites and hot-fix pipelines, reducing regression incidents.
- Optimized performance, cutting app launch time by 40%.

Stack: Flutter, Firebase, Dart

Swam Technology

Sep 2022 – Dec 2023

Machine Learning Engineer & Full Stack Web Developer

- Built abuse-detection ML models (TensorFlow, Python) achieving 92% accuracy.
- Developed a law-firm CMS with React, Node.js, and MongoDB, cutting content update time in half.

- Automated end-to-end pipelines bridging analytics and production systems.

Stack: Python, TensorFlow, React, Node.js, MongoDB

Innovation Tech

2021

Software Engineering Intern

- Reviewed code and wrote unit/integration tests for Java/XML applications.
- Designed intuitive UIs in Figma for new feature rollouts.
- Gained hands-on experience in Agile workflows and sprint planning.

Stack: Java, XML, Figma, Firebase

Projects

Flagship SaaS Products

- **Wryte** ([Live](#))
Cloud-based collaborative editor for Markdown writers — sign in with GitHub or Google, pull repository content into a unified workspace, and schedule, publish, and co-edit documents in real time. A custom sync engine bridges the GitHub content database with a Convex-backed working layer, so collaborators can edit live without losing canonical history. Keyboard-shortcut-first UX for power users; AI integrations via OpenRouter (Claude Opus and other providers) handle grammar correction, rewriting, and editorial suggestions. Built to replace the fragmented Markdown tooling around my own publishing workflow on [rafay99.com](#).
Next.js, React, Convex, Clerk, GitHub OAuth, Google OAuth, Claude Opus, OpenRouter, Custom Sync Engine
- **Ourtrail** ([Live web preview](#) — iOS & Android in active development)
Privacy-first platform for collecting and sharing trip memories across web and mobile. Users sign up, connect Google Photos or upload manually, invite friends and family to a shared trip album, and pull every traveler's photos into one place instead of leaving them scattered across WhatsApp and AirDrop. Web and mobile share a single typed Convex back end with a dedicated upload pipeline. Roadmap features include AI-powered scene detection, smart search across albums, and automatic memory-section compilation.
React Native (iOS/Android), Next.js 16.2 (Web), TypeScript, Convex, UploadThing, Google Cloud Storage
- **Env Pilot** ([GitHub](#) | [Live](#))
SaaS platform for secure environment-variable management with organizational controls, a VS Code extension, a CLI tool, and payment gateway integration. Uses WorkOS Auth and its environment-variable vault for enterprise-grade security.
Next.js, WorkOS, Convex, Tailwind CSS, Framer Motion
- **Lumo** ([GitHub](#) | [Live](#))
Full-stack financial tracking application (Android & iOS) with receipt scanning via camera/upload, transaction management, an admin panel, and a companion website. Production-grade architecture with Convex real-time back end.
React Native, Convex, Firebase Auth, Tailwind CSS

Web Applications

- **TudoNum – Landing Platform** ([GitHub](#) | [Live](#))
Dynamic landing page for the TudoNum super app featuring a 10-level referral/affiliate system, real-time back end (Convex), and secure authentication (Clerk) with a competitive onboarding flow where users earn convertible points.
React, Next.js, Convex, Clerk, Tailwind CSS, Framer Motion
- **Lead Finder – SaaS** ([Live](#))
AI-powered business lead generation platform using Google Maps API integration and web scraping. Multiple AI models (OpenAI, Gemini) surface actionable market insights.
React, Vite, TypeScript, Convex, Clerk, OpenAI, Gemini
- **Image Composer** ([GitHub](#) | [Live](#))
Privacy-first client-side image processing platform for compression, enhancement, SVG editing, format conversion, and AI-powered image manipulation.
React, Next.js, Node.js, Sharp, Replicate API, Vercel

- **MarkdownPro** ([GitHub](#) | [Live](#))
Modern Markdown editor with real-time preview, multiple export formats, auto-save, and Web Worker-based rendering.
React, TypeScript, Vite, Tailwind CSS, Web Workers
- **Shafiq Law Associates** ([Live](#))
Performant, content-driven law firm website built with Astro and MDX, enhanced with interactive React components.
Astro, MDX, React, Tailwind CSS

Mobile Applications

- **MS Bridge** ([GitHub](#))
Cross-platform lecture notes app with offline-first storage (Hive), cloud sync (Firebase), and shareable note links.
Flutter, Firebase, Dart, Hive
- **Meaning Mate** ([GitHub](#))
AI-powered vocabulary builder with quizzes and progress tracking.
Flutter, Firebase, Dart
- **Dienstleisto** ([GitHub](#))
Job-seeking portal with category filtering. Built the Flutter front end; Laravel back end.
Flutter, Laravel

Open Source Contributions

- **Mole** — macOS deep-clean utility, 51k+ stars on GitHub ([PR #755 — merged](#))
Added a `--list` flag to `mo uninstall` that enumerates installed applications across system, user, Homebrew, and Setapp sources, surfacing both the display name and the exact Homebrew cask token required for uninstall. Implemented in Bash with 12 bats test cases. Maintainer merged after refactoring the capability into the existing uninstall surface.
- **TLDR Pages** — community-maintained simplified man pages ([#9889](#), [#9890](#), [#10604](#), [#10609](#), [#10628](#))
Five merged PRs adding new platform pages (e.g., `swaylock` for Linux/Wayland) and improving existing CLI documentation.
- **TinaCMS** — open-source headless CMS
Filed reproducible bug reports against subsystems where codebase complexity put direct fixes out of immediate reach.

Technical Skills

Languages: TypeScript, JavaScript, Python, Dart, SQL, Bash, Java, C++, C#, C

Frontend & Mobile: Next.js, React, React Native, Flutter, iOS, Android, Astro, Vite, Tailwind CSS, Framer Motion

Backend & APIs: Django, Django REST Framework, Node.js, Express, Laravel, REST APIs, Webhooks

Data & Storage: PostgreSQL, MongoDB, Convex, Prisma, Firebase, Supabase, Google Cloud Storage

Auth & Payments: Clerk, WorkOS, Firebase Auth, OAuth 2.0, Stripe, WalPay, RBAC, SMTP

AI / LLM: Claude SDK, Claude Code SDK, OpenRouter, OpenAI, Google Gemini, Replicate, TensorFlow

Cloud, DevOps & Tools: AWS, GCP, Vercel, Docker, GitHub Actions, CI/CD, Linux, macOS, Git, Figma

Education

Capital University of Science and Technology
BS in Software Engineering (GPA: 3.0 / 4.0)

Sept 2018 – Sept 2022