

JEFFIN JOSE

Full Stack Engineer

BTech - Computer science & engineering (2015)

2016-Present

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Sheffield, United Kingdom



TypeScript (5 years), JavaScript (8 years), Java (4 years), Python

Frontend:

- Frameworks: Next.js, React.js, React Native, Angular.js, TurboRepo.
- UI/Styling: Tailwind CSS, ShadCN, MUI, daisyUI.
- 3D / BIM Visualisation: Three.js, ThatOpen Components, xeokit SDK (IFC viewers).
- State Management: React Query, Context API, Zustand, Redux.
- Authentication: NextAuth, Auth.js, Okta, BetterAuth, SSO, OAuth.
- React Server Components, Server-Side Rendering, Server Actions.
- Zod, TRPC, React Hook Form, React Query, GraphQL
- Playwright. Vitest

Backend:

- Node.js: NestJS, Express.js, Node.js.
- Java: Spring Boot, Hibernate, Camunda BPMN.
- Python: FastAPI, SQLAlchemy, Pydantic.
- BIM / CAD: IFC4, IfcOpenShell, Shapely (geometry processing)
- APIs: RESTful, WebSocket, SSE, NATs.
- Data: MySQL, PostgreSQL, Row-Level Security (multi-tenant isolation). MongoDB, Redis, DynamoDB, S3, TypeORM, DrizzleORM.
- Strapi, Supabase, Payload CMS.
- Architecture: Microservices, Monolith, Serverless, Event-Driven.

Cloud, CI/CD & Dev tools:

- AWS: Amplify, Cognito, DynamoDB, S3, EC2, Lambda.
- Azure: Active Directory (Entra), App Service, Container Registry, Kubernetes.Service Bus, Postgres, Redis. Microsoft Graph API, Defender for Endpoint, Sentinel, Azure Resource Manager.
- CI/CD: GitHub Actions, Docker, Docker Compose.
- Deployment: Vercel, Azure, AWS, Render, Netlify.

- Project tools: Semantic Release, Husky, ESLint, Prettier.

AI:

- Dall-E, Replicate, Hugging Face, Chatbot: OpenAI Assistants, Threads, Messages.
- ML: PyTorch, Computer Vision (image segmentation/object detection).
- Image & Document Processing: OpenCV, scikit-image, PyMuPDF, OCR (Docling, EasyOCR, Tesseract).
- Claude Code / AI-assisted development workflows.
- OpenAI API for summarisation and content generation

PROFESSIONAL EXPERIENCE

BeMa Cyber Tech Ltd, London - June 2025 - October 5th 2026

Senior Full Stack Engineer (Remote)

Tech Stack: TypeScript | Next.js | React Query | React Hook Form | Zod | PostgreSQL | Drizzle ORM | Better Auth | Microsoft Entra ID | Microsoft Graph API | Stripe | Python | FastAPI | Pydantic | SQLAlchemy | PyTorch | OpenCV | PyMuPDF | IfcOpenShell | Three.js | Azure | Docker | Kubernetes

Work directly with the founders and CTO to design and build security and compliance SaaS products for Microsoft 365 businesses and MSPs. Own the full stack, from architecture and data model to UI.

1. AI Floor Plan to BIM Converter (MVP)

- Built a tool that turns PDF floor plans into 3D building models (IFC).
- Used an AI model to find walls, rooms, doors, and windows in the plan.
- Built the backend in Python with FastAPI, PyTorch, and OpenCV.
- Created the 3D model files with IfcOpenShell.
- Built a web viewer in Next.js and Three.js to view and edit the model.

2. Lorvaris ComplianceOS – Compliance Automation Platform

- Built a platform that checks a company's Microsoft 365 setup against ISO 27001, GDPR, NIS2 and SOC 2.
- Collected security data from Microsoft Graph, Defender and Azure.
- Built a scoring engine that turns that data into a compliance score.
- Added questionnaires for rules that can't be checked automatically.
- Kept each customer's data separate using database row-level security.
- Added user roles and permissions, invitations and Microsoft sign-in.
- Showed score history and trends for each framework.

- Deployed with Docker and Kubernetes.

3. Teron – Security Dashboard for MSPs

- Built a dashboard that shows MSPs the security status of all their clients in one place.
- Pulled data from Microsoft Defender, Sentinel, and Graph API.
- Moved the app from React and Express to Next.js.
- Added charts for Secure Score, vulnerabilities, devices, and 90-day trends.
- Set up Microsoft sign-in and onboarding for new clients.
- Built subscription billing with Stripe.
- Added PDF reports, email alerts, and multi-language support.

Jan 2025 – June 2025

Newsquawk Voice Limited | London

Senior Full Stack Engineer (Remote)

Tech Stack: TypeScript | Next.js 15 | React | TailwindCSS | ShadcnUI | Motion | Payload CMS
| Python | FastAPI | OpenAI API

Worked directly with the founders to plan, design, and build an AI news platform for traders.

NewsQuawk news platform with AI integration

Designed and developed an automated news platform integrated with AI for traders.

- Built a news platform for traders with Next.js and Payload CMS.
 - Used Payload CMS so admins could manage news and marketing content.
 - Created reusable Payload blocks to build news and marketing pages quickly.
 - Built a Python FastAPI service that collects news from different sources.
 - Used OpenAI to summarise news and generate content, which was then sent to the CMS automatically.
 - Streamed live headlines from the backend to the website.
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Feb 2022 - Dec 2024

Knights LLC (Early-stage esports startup) | Pittsburgh, United States

Senior Full Stack Developer - Tech Lead (*Remote*) | (2 years, 10 months)

Tech Stack: TypeScript | Next.js | React | TailwindCSS | ShadcnUI | React Query | NestJS | Node.js | Express.js | PostgreSQL | DrizzleORM | TypeORM | Redis | NATS | WebSockets | Socket.IO | Discord.js | Azure AD B2C | Azure Service Bus.

Worked directly with the founder and CEO on product design and led the tech team from idea to launch.

Leadership

- Led the frontend, backend, and UI/UX teams, and owned all frontend and backend projects.
- Planned, prioritised, and assigned work in agile sprints.
- Mentored junior developers and reviewed code and pull requests.

1. Matchbot – Esports Event Management Platform

- Built an admin dashboard in Next.js to create and manage tournaments and events.
- Added onboarding, multi-step forms and leaderboards.
- Designed and built a backend of 7 NestJS microservices.
- Built matchmaking and queues that handle a large number of players.
- Sent live updates using NATS, WebSockets and SSE.
- Secured the APIs with JWT and role-based access, including access based on Discord server roles.
- Used Redis for caching and moved the database from TypeORM to DrizzleORM.
- Integrated with Strapi, HubSpot and Discord.

2. Matchbot Discord Bot

- Built a Discord bot for admins to run tournaments and for players to join matches.

- Added slash commands, interactive panels, and live notifications for players and admins.
- Added voice channels, leaderboards, match reports, loyalty rewards and referral invites.

3. Pick-Ban – League of Legends Draft App

- Built a Discord bot for admins to run tournaments and for players to join matches.
- Added slash commands, interactive panels, and live notifications for players and admins.
- Added voice channels, leaderboards, match reports, loyalty rewards and referral invites.

4. Authentication & Onboarding

- Built a custom sign-in flow with Azure AD B2C, using Discord as the login provider and Discord server roles for access.
- Built a central onboarding app to collect player information.

5. Game Client Integration

- Connected to the Riot Games client API to process live match data.
- Built a live queue system to manage and monitor championship events, using Azure Service Bus.

March 2021 - Nov 2021

TapIn Pay (Early-stage retail tech startup) | Richmond, BC, Canada

Full Stack Developer (*Remote*) | (9 months).

Tech Stack: TypeScript | Next.js | React Native | TailwindCSS | Material UI | NestJS | Prisma | GraphQL | PostgreSQL | Redis | Firebase | WebSockets | Google Maps API | Leaflet | AWS EC2 | Docker | GitHub Actions

Built inventory, ordering, and delivery tracking tools for local retailers, and designed the UI/UX for the web and mobile apps.

1. Inventory Management Web App

- Built a Next.js app for stores and warehouses to manage their stock.
- Connected it to the backend with REST and GraphQL APIs.
- Built the UI with Tailwind CSS and Material UI.

2. Driver Delivery App (Android / iOS)

- Built a React Native app for drivers to accept orders and get delivery directions.
- Added maps and live location with the Google Maps API and Leaflet.
- Added chat, calls, push notifications, and live updates.

3. Order Tracking Backend

- Built a NestJS backend to manage orders and track deliveries.
 - Secured the APIs with JWT and role-based access.
 - Stored data in PostgreSQL using Prisma and sent live updates over WebSockets.
 - Sent push notifications with Firebase.
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January 2020 - February 2021

Smartechns LLC (Early-stage construction tech startup - SAAS) | Pennsylvania, United States

Full Stack Developer (**Remote**) | (1 year, 2 months).

Tech Stack: TypeScript | Java | Spring Boot | Hibernate | Jersey | Camunda BPMN |
AngularJS | RxJS | React Native | Node.js | Express.js | MySQL | Redis | AWS (DynamoDB, S3,
Cognito, SNS, EC2) | Jitsi SDK | WebSockets | GitLab CI/CD

Worked with the founder and product manager to plan features and built the company's web, mobile and backend apps.

1. Construction Site ERP – Admin Panel

- Built an admin web app in AngularJS to manage construction site workflows and diagrams.
- Added dashboard charts and in-app video calls.

2. Workflow Backend

- Built REST APIs in Spring Boot, with Camunda BPMN to automate and monitor site workflows.
- Secured the APIs with JWT and role-based access.
- Stored files in S3 and their details in DynamoDB.
- Built a JSON data storage service on DynamoDB using Hibernate.
- Built a Node.js service to send SMS and email notifications through AWS SNS.

3. Video Calling

- Researched and built video calls for web and mobile using the Jitsi SDK.
- Hosted a custom Jitsi setup on AWS EC2 with Docker.

4. Workflow Mobile App

- Built a React Native app for site workers to follow step-by-step workflows, with videos, documents, and video calls.

January 2016 - December 2019

Flexiapps Solutions (Educational technology - SAAS) | Bangalore, India

Full Stack Developer - (On-site) | (4 years)

Tech Stack: JavaScript | Java | ReactJS | React Native | Android SDK | JSP | HTML/CSS | Google Maps SDK | Firebase | SQLite

1. Eduflex ERP (Web)

Worked on the ERP web app used by schools and colleges for finance, fees, payroll, and attendance.

2. Eduflex Friendly App (Android / iOS)

- Built a React Native app for attendance and assignments.
- Used Firebase for push notifications and SQLite for offline storage.

3. School Bus Tracking App (Android)

- Built a native Android app in Java so parents could track the school bus live.
- Used the Google Maps SDK for maps and live location.

4. Labournet Appointment App (Android / iOS)

Built a React Native app to create and manage appointments, using Firebase and SQLite.

PERSONAL PROJECTS:

1. Ownerwise: Rental Management Platform (India)

Tech Stack: TypeScript | NestJS | PostgreSQL | Drizzle ORM | Redis | Bull | Next.js | React Native (Expo) | NativeWind | React Query | Zustand | Payload CMS | WhatsApp Cloud API | Razorpay | AWS S3 | Docker |

- Built a platform that helps property owners in India rent to tenants safely, from invite to signed agreement.
- Owners and tenants can use it through WhatsApp, a web app or a mobile app.

- Built a WhatsApp bot with the Meta WhatsApp Cloud API, with conversation state stored in Redis.
 - Added tenant screening and ID checks (KYC) using DigiLocker, PAN and UPI verification.
 - Added e-signed rental agreements with e-stamp, generated as PDFs.
 - Built payments with Razorpay for fees, deposits and rent. It's designed so the payment provider can be swapped easily.
 - Added maintenance requests, notices and property inspections.
 - Built the backend in NestJS with Bull queues for reminders and background jobs.
 - Built the mobile app with Expo and React Native, and the web app with Next.js.
 - Built the marketing site with Next.js and Payload CMS.
 - Deployed the backend on DigitalOcean with Docker and GitHub Actions.
2. **Crest (NextJS, NestJS, Passport, OAuth, & TypeScript):** A centralized global profile to share all your social links (Similar to Linktree). <https://crest-tan.vercel.app>
 3. **Other projects:** <https://jeffinjose.dev/projects>