

SAMUEL CHARBIT

Senior Software Engineer | Full Stack · Distributed Systems · AI

Tel Aviv, Israel | +972-58-404-6422 | samrub06@gmail.com | [linkedin.com/in/samuelcharbit](https://www.linkedin.com/in/samuelcharbit) | github.com/samrub06 | myportfolio-samuel.s3-website-useast-1.amazonaws.com

5+ yrs experience · 200 → 5,000+ users scaled · 100+ simulations/week processed · 2 engineers mentored

SUMMARY

Senior Software Engineer with 5+ years building scalable SaaS platforms, AI-powered systems, and distributed architectures. Deep experience across React/TypeScript, Node.js, PostgreSQL/MongoDB, and cloud-native systems on Azure and Google Cloud. Track record of owning system architecture end-to-end, scaling production platforms to thousands of concurrent users, and mentoring engineers. Comfortable moving between real-time AI/streaming systems, distributed job processing, and enterprise front-end applications.

TECHNICAL SKILLS

Frontend: React, Next.js, TypeScript, Redux Toolkit, React Query, Tailwind CSS, shadcn/ui, MUI, D3.js
Backend: Node.js, Express, NestJS, REST APIs, WebSockets, Python
Distributed & Messaging: RabbitMQ, Redis, Worker Queues, Event-Driven Architecture, Distributed Systems
Cloud & DevOps: Google Cloud Platform (Cloud Run, Load Balancing, VPN, Cloud Triggers), Microsoft Azure (STT/TTS, Cognitive Services), AWS (EC2, S3, Auto Scaling), Docker, CI/CD, Vercel
Databases: PostgreSQL, MongoDB, Supabase
AI & Real-Time: Gemini LLM, ElevenLabs, Speech-to-Text/Text-to-Speech, OCR, LLM Integration, Low-Latency Streaming

PROFESSIONAL EXPERIENCE

Edventure.il (*EdTech, AI tutoring platform, Israel & US markets*) Oct 2025 – Present
Senior Fullstack Developer | Herzliya, Israel

- Owned end-to-end delivery of an AI tutoring platform (Edwin): personalized classroom sessions with a real-time 3D avatar, multimodal dialogue, and live teacher visibility.
- Designed the conversational stack: Azure STT, LLM-driven pedagogical responses, dual TTS (ElevenLabs audio + Azure visemes), and frame-accurate lip-sync on Three.js GLB avatars.
- Migrated production workloads from Microsoft Azure to Google Cloud (Cloud Run, global Load Balancing, VPN, event-driven Cloud Triggers), improving deployment velocity and network isolation while keeping low-latency AI voice sessions.
- Hardened the platform for education-sector use with SOC 2 / ISO 27001-aligned controls, encrypted data paths, and enterprise-grade security posture.
- Scaled the platform from 200 to 5,000+ registered users across schools; mentored 2 engineers alongside the CTO on architecture decisions.

DesignBuilder Software (*Building energy-performance simulation software, Israel*) Jan 2024 – Oct 2025
Full-Stack Developer | Tel Aviv, Israel

- Designed and operated a distributed job pipeline (dispatcher + Windows workers) for EnergyPlus/EPC simulations: MongoDB-backed queue, pull-based dispatch, retries/timeouts, and AWS Auto Scaling of worker capacity.
- Built a Three.js 3D building viewer (IDF geometry) with inspection tooling (zones, envelope, SHGC/solar), embedded in a React product via feature-flagged org access.
- Owned the full-stack energy compliance platform (React/TypeScript + Node/Express + MongoDB): revisions lifecycle, results packaging (S3/Drive), PDF validation reports, and admin job-queue monitoring.
- Integrated external EPC CLI simulators into workers (input prep → run → parse/collect → completion), with multi-version routing and Amazon vs on-prem worker affinity.
- Delivered product features end-to-end: multi-tenant orgs, permissions, revision compare/analysis views, and operational hardening (cron roles, maintenance mode, worker auth).

Veepee (*One of Europe's largest e-commerce platforms*) Jan 2021 – Jan 2024
Full-Stack Developer | Tel Aviv, Israel

- Built React/TypeScript BackOffice tools for supply-chain and merchandising operations (SRM, InFlow lifecycle) used by 1,000+ internal users.
- Implemented frontend architecture with Redux Toolkit and React Query; improved performance via code splitting and lazy loading.
- Integrated Node.js + PostgreSQL REST APIs and added monitoring via Sentry.

PROJECTS

Tabasco: Music Platform (music-tabs.vercel.app)

- Built and shipped a web platform for musicians to discover, read, transpose and organize sheet music and guitar tabs, from scratch to production on Vercel.
- Stack: Next.js, TypeScript, Supabase, PostgreSQL, Tailwind CSS, shadcn/ui; mobile-first, ad-free UX with chord transposition and a responsive music viewer.

EDUCATION

Full-Stack Coding Bootcamp, Israel Tech Challenge (ITC), Tel Aviv (2020 – 2021)
Master's Degree, Marketing & Data Analytics, NEOMA Business School, France (2017 – 2022)

LANGUAGES

French (Native) · English (Native/Bilingual) · Hebrew (Full Professional) · Spanish (Professional Working)