Stephen Cotterrell

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Authorized to work in the US; no sponsorship required.

Software developer focused on backend integrations, with experience in TypeScript, Python and SQL. Background in data analytics and chemical engineering research; relocated to San Francisco in 2026.

Technical Skills

Languages:	TypeScript, Python, SQL, Go, C
Backend:	HTTP APIs, PostgreSQL, Prisma, Redis, BullMQ, RabbitMQ
Web & APIs:	Next.js, React, tRPC, Google Calendar API, Stripe, webhooks
Tools:	Linux, Git, Docker, AWS (S3, EC2), GitHub Actions

Selected Project

MyStudioKeep — Backend development mystudiokeep.com

Collaborative personal venture for trainers to manage clients, bookings and payments.

TypeScript, Next.js, tRPC, Prisma/PostgreSQL, Redis/BullMQ

- Implemented Stripe payments and subscriptions, handling duplicate and failed webhooks with event tracking, retry recovery and regression tests.
- Improved Google Calendar synchronization with Redis-backed BullMQ jobs, webhook coalescing, locking and retries.
- Managed deployment and hosting, including GitHub Actions/Vercel staging automation and a test subdomain for pre-release checks.
- Added PostHog error tracking; debugged application and deployment issues.

Professional Experience

Business Analyst — Data Science | PPT Group Feb 2024–Mar 2025

- Built automated ETL workflows using SQL, Jupyter Notebooks and Power Query to integrate third-party data for analysis.
- Collaborated with data scientists on a Python customer-churn prediction model.
- Developed 15+ sales/churn KPIs and Power BI dashboards for Howdens Joinery.

Engineering Research — Catalysis Institute, UCT Feb 2019–Feb 2023

- Designed experiments and equipment for hydrogen-production research; applied troubleshooting and root-cause analysis to investigate faults.

Senior Teaching Assistant — University of Cape Town Feb 2019–Dec 2022

- Taught numerical simulation and optimization, helping students translate engineering problems into mathematical models and interpret computational results.

Education & Training

MSc Engineering (Chemical Engineering), **University of Cape Town** Dec 2023

BSc Chemical Engineering, **University of Cape Town** Dec 2018

Training: Boot.dev Backend Path (May 2026); Scrimba Fullstack Path (Nov 2025).
IBM Data Science Professional Certificate (Jan 2025); CS50x (completed).

Interests & Achievements

Speedcubing: former national 3×3 Rubik's Cube record holder (9.81 s single; 11.77 s average).

Brewing: led a postgraduate brewing team producing award-winning beers (2019–2022).