Liam Turner — Software Engineer

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📇 PROFILE

I am a back-end-leaning full-stack software engineer proficient in JavaScript, TypeScript, SQL, Ruby and React. I excel at solving complex problems systematically and communicating technical concepts precisely, leveraging analytical thinking and attention to detail developed during my legal career. Recently, I created Frame, an image embedding pipeline enabling sophisticated search and recommendation functionalities.

💼 EXPERIENCE

Creator & Software Engineer, Frame 🔗   2024 – present

Frame is a multimodal image embedding and search platform that deploys directly to a user's AWS account.

- Architected scalable, serverless infrastructure using AWS Lambda, S3, API Gateway, and SQS with a cost-efficient, scale-to-zero design.
- Developed a fully type-safe API using Hono and Zod for schema validation, automatically generating OpenAPI documentation.
- Implemented robust image validation and preprocessing pipelines for downstream multimodal embedding models using the Sharp image processing library.
- Engineered asynchronous request handling with SQS queues and retry logic, decoupling user requests from embedding workflows to minimize latency.
- Built an SDK to streamline developer integration and simplify interaction with the Frame API.
- Automated infrastructure deployments with CLI tooling powered by the AWS CDK, reducing a 30+ step workflow to a few commands.
- Authored a comprehensive case study outlining the problem space, technical trade-offs, and architectural decisions that led to the development of Frame.
- Orchestrated remote collaboration with an international team of four engineers across multiple time zones using agile methodologies and pair programming.

Software Engineer, Open-Source Projects   2022 – 2024

Led the development of open-source projects focused on developer tools and applied AI, including:

- Grains: A restaurant dish recommendation engine using retrieval-augmented generation (RAG) to extract insights from Google Maps reviews. Built with React, TypeScript, Node.js, Express, PostgreSQL+pgvector, OpenAI API integration with Redis caching and Zod for standardized LLM output validation.
- HookHaven: A full-stack webhook testing tool for inspecting HTTP requests. Built with React, TypeScript, Node.js, Express, PostgreSQL, MongoDB, with NGINX-based routing, deployed on DigitalOcean.

Real Estate Lawyer, Womble Bond Dickinson & Gowling   2016 – 2024 | Leeds

- Managed multimillion-pound property transactions for national housebuilders, overseeing projects from initial title review to acquisition and sales.
- Drafted complex legal agreements with precision, mitigating risks for high-value developments.
- Led cross-departmental collaboration to complete large-scale infrastructure deals to tight deadlines.
- Mentored and supervised junior team members, providing technical guidance and professional development while maintaining quality standards and fostering a collaborative and positive work environment.
- Analyzed complex legal documentation and translated technical concepts into clear, actionable insights that drove stakeholder decision-making.

🧠 SKILLS

Front-end
JavaScript, TypeScript, React, Astro, HTML/CSS, Axios

Cloud
Digital Ocean, AWS (Lambda, S3, IAM, CDK, API Gateway, Secrets Manager, Bedrock, RDS, SQS), Heroku

Back-end
Node.js, Express, Hono, Ruby, Sinatra, PostgreSQL (incl. pgvector), MongoDB, REST APIs, Zod, Redis

Other
Git/GitHub, Docker, Linux, Bash, HTTP, WebSockets, OOP, Nginx, Postman, OpenAI, Jest, SQL, OpenAPI

🎓 EDUCATION

BPP Law School, Legal Practice Course   2015 – 2016
Distinction

Newcastle University, Law LLB Honours Degree   2012 – 2015
1st Class Honours