Tom Oliver

https://www.tomoliver.net   me@tomoliver.net   https://github.com/revilotom   +44 7726918003

Summary

Senior Fullstack Engineer specialising in Typescript, React, Nodejs/Bun with strong Computer Science technical abilities. Lead the development of an open banking product for the Canadian market. Multiple user facing UIs as well as admin dashboards and internal tools. In depth experience working with Financial Grade API (FAPI) and OIDC authentication/authorisation flows. Passionate advocate of reproducible dev environments/builds/deployment.

Recent Personal Projects

Personal Programming Blog

– Nextjs
– MDX
– Web mentions
– Lazy image loading

B2B CV formatting tool (WIP)

– HTMX + React
– Bun
– OpenAI
– NixOS

Professional Experience

2022-2025

Caspian One Open Data - Remote, UK

Senior Fullstack Engineer
I joined this Fintech in its nascent stage with a project to create an open banking platform for a major Canadian Bank.

– Implemented a working end-to-end solution meeting Financial Data Exchange (FDX) and Financial Grade API (FAPI) standards. Comprehensive understanding of OIDC flows for authentication/authorisation.

– Created and enforced API contracts using open API and associated code gen tools.

– Created fully automated CI/CD deployment pipelines leveraging Docker, Github actions and AWS lambda, S3

– Implemented intelligent monorepo design that allowed speedy deployments and simple dependency management.

– Created reusable component library including both generic and industry specific elements.

2021

Uzabase - Remote, Tokyo - Japan

Full Stack Software Engineer
Working as part of a extreme programming team I helped develop a business to customer product for the expert economy.

Software development practices

– Top down test driven development, i.e e2e -> integration -> unit
– Trunk based development
– Development team lead operations

2019-2021

Visional - Remote, Tokyo - Japan

Full Stack Software Engineer
Software Engineer at Bizreach Customer Product Development Division
High class job switching service

Responsible for developing the front end of the Bizreach Premium Career platform

– Choosing the technology stack
– Front-end "owner"

Languages & Stacks

Machine

TypeScript

- Generics, including react components.
- Type Driven Development
- React
  * Nextjs
    + Incremental static regeneration (ISR)
    + Internationalisation
    + SEO and open graph
  * Remix
  * React-Query, Recoil
  * StyledComponents, Emotion, MaterialUI
    + Atomic Design
    + Experience creating reusable component libraries
  * Jest, Cypress
  * Progressive Web App (PWA)
- Node, Bun
  * Open API
    * Creating OpenAPI Schemas
    * Using Generated OpenAPI Functions
  * Express + middleware, Hono, Serverless framework
  * Security using FAPI/OIDC, JWTs, introspection
  * Jest, Nock

Continuous Integration

- Circle CI
- Github Actions

Databases

- MongoDB
- DynamoDB
- MySQL
  * Recursive Queries
  * Stored Procedures
  * Performance Tuning, Indexes
  * Views
- PostgreSQL
  * Transactions
  * Dev Ops

Infrastructure

- NixOS
- Docker
- Azure
- AWS
  * S3
  * Lambda

Human

English

- Native

Japanese

- Fluent (JLPT N1)

Education

2015–2019	Bsc Computer Science - 1st Class

University of St Andrews
Awarded a place on the Dean's list for Academic excellence for each of the 4 years of my stay.
Dissertation subject: Visualisation of Constrain Solver Search Paths.
Honours Modules:

- Operating Systems
- Databases
- Constraint Programming
- Networking
- Computational Complexity
- Data Encoding
- Computer Security
- Artificial Intelligence
- Logic and Software Verification
- Software Engineering Principles
- Software Engineering Practice
- Information Visualisation and Visual Analytics

Preferred Tech

NeoVim Linux Nix NixOS SwayWM Zsh Git GitHub FZF RipGrep Alacritty CoC Latex SSH curl Bun Prettier Eslint Nx Firefox