Joseph Knowles (Leeds, UK)

Spent 9 years accelerating startups from Seed stage to Series B with quality full-stack code and leadership. Genuinely passionate about creating delightful User Experiences with speed and efficient collaboration.

Experience

Polar Analytics - UK REMOTE (April 2022 - September 2024) Senior Full-stack Developer React, Node.js, Typescript, GPT API, Prompt engineering, AWS

Joined as the second full-stack engineer and made extensive contributions across the full application. Worked through the full SDLC from ideation, to deployments and monitoring in AWS, taking us from seed stage through two rounds of Series A funding, totalling \$24 million raised.

Work includes building an AI data report generator powered by ChatGPT and a billing system that handles over \$3M in ARR.

Zen Educate - UK REMOTE (August 2020 - April 2022) Senior Full-stack Developer React, redux, React Native, Ruby on Rails, AWS, Heroku

As a full-stack engineer I implemented critical features across the application. Involved in every phase of the SDLC, including ideation, deployment, process iteration and AWS monitoring. I directed improvements to the development process, including:

- Introducing E2E tests with **cypress** and training the team in how to write good tests
- Moving towards more stringent code reviews and focusing on improving code quality

WealthKernel - UK REMOTE (April 2017 - July 2020) Senior Full-stack Developer React, redux, dotnet, Azure, Node.js

As the 5th employee at this startup, I led the development of our most important applications from initial planning through to shipping to customers. The success of these applications allowed us to raise a \pounds 4.5m Series A. Also, built tooling in Node.js.

FNZ - Brno, The Czech Republic (August 2015 - December 2016) *Full-stack Developer* **React**, dotnet, VB

Worked in a small internal agile team developing a PoC in .NET for an innovative payments product. I quickly learned React and started working on a new site for a £multibillion investment platform, taking ownership of this project after a few months.

Skills

Technologies - Main technologies I've worked with.

- React 8 years of professional experience specialising in React
- Ruby on Rails
- React Native
- Node and its ecosystem including webpack, express and serverless architecture using firebase functions
- Many react libraries including: Redux, Redux-saga, React-router, create-react-app, nextjs, styled-components, material-ui, react-three-fiber
- GraphQL

- Testing frameworks Cypress.io, jest, react-testing-library
- **Git,** GitHub, GitLab
- Heroku, GCP, Firebase, AWS, Azure

Business and development methodologies - I was taught and practised **agile** principles during my training at makers academy. This sparked a keen interest in the area, and I've been persistent in advocating for continuously improving processes since then.

TDD - Test Driven Development is important to me as it was a central part of my initial training. I really like to use cypress.io and I've used this on all new projects since its public beta launch in 2017, and introduced it at Zen Educate and Polar Analytics

UX design - Since the product is the main priority for me, I'm obsessed with UX. I contributed to designs at Zen and WealthKernel, and I've read multiple books and endless articles to improve my skills.

Pair programming - I learned to code using pair programming over video-calls with makers academy. I learned the importance of pair programming and how to use it to teach effectively.

Side projects

I build side projects to learn new tech and practice implementing design patterns. See my <u>portfolio website</u> for more. Examples:

<u>https://sayitright.academy</u> : LLM based language learning app. Like Duolingo, but with content customised by user. (React, Rails, GPT API, styled-components)

<u>https://yspexplore.com</u> : 3D rendered with three.js, location based guide for a sculpture park, UI inspired by Pokémon GO, deployed on web and natively on the google play store. (Using React, Ionic, three.js, react-three-fiber, Android, Rails) <u>Screenshots and video demo</u>

<u>https://predictable.xyz</u> : A simple premier league match prediction game. Averaged 15 weekly users over 6 seasons. (Node.js, react, firebase, serverless)

Education

Makers Academy (February to June 2015)

An intensive, full-time coding bootcamp. Formed an incredible foundation for learning to build high quality applications as part of an agile team.

University of York

Biology BSc 2:1 (2010 - 2014)

- Mainly focussing on genetics and molecular biomedicine
- Completed a final project involving computational analysis of DNA
- Spanish elective went from no knowledge to conversational proficiency in one year

ABRSM

- Piano Grade 8
- Music Theory Grade 5