

# Jonathan Furness

## Full-Stack Developer

[GitHub](#) | [LinkedIn](#) | [Personal Portfolio](#)

London, UK

[jlsfurness@gmail.com](mailto:jlsfurness@gmail.com)

0790 351 8131

## PROFESSIONAL SUMMARY

- 3+ years of professional full-stack development experience building solutions using Node.js, TypeScript, and React
- Additionally skilled in Python with 7+ years applying it to finance, developing profitable algorithmic trading strategies
- Recognised problem solver, combining an analytical and collaborative approach to complex technical challenges
- A passion for building solutions to real-world problems, which drove my transition from managing £100M+ in private client investments to software engineering

## SKILLS

**Languages:** JavaScript, TypeScript, Python

**Frontend:** React, Next.js, Tailwind CSS, HTML, Redux

**Backend:** Node.js, Express, Python, FastAPI

**Database:** PostgreSQL, MongoDB, DocumentDB

**Testing:** Jest, Vitest, Testing Library, Playwright

**DevOps:** Amazon Web Services (AWS), Docker, GitHub Actions, Sentry

## PROFESSIONAL EXPERIENCE

### Senior Full Stack Developer, Antler Digital

*London, UK (Remote) | Apr 2022 – Present (3+ Years)*

Antler Digital is a consultancy helping companies develop digital products. Worked across a range of client projects, with primary responsibility for leading the development of One Tribe's carbon emissions API and full-stack platforms. Grew into a senior position leading the development of key projects and managing client relationships.

#### Key Client Engagements:

##### *Full Stack Developer, One Tribe | Oct 2022 - Present*

Led the architecture and scaling of One Tribe's carbon credit platform with the CTO, enabling businesses to track, monitor, and offset their environmental impact.

- Led carbon emissions API development covering 60+ emission factors for business carbon calculations
- Built Next.js admin panel and calculator using App Router, Server Components, and React Suspense
- Architected event-driven backend integrating with 6+ e-commerce platforms, processing thousands of daily events
- Developed Stripe payment processing, handling £100K+ revenue across multiple pricing tiers

#### Platform Improvements:

- Reduced critical incidents by 76%, implementing TypeScript, Zod validation, improved CI/CD, and Sentry
- Accelerated development with Tailwind CSS implementation, decreasing stylesheet size by 40%
- Migrated 1.5+ million records from NoSQL to PostgreSQL for improved database querying
- Developed testing suite and achieved 75% coverage on critical paths

#### Collaboration:

- Partnered with cross-functional teams on sprint planning and feature scoping
- Conducted code reviews and mentored junior developers while maintaining quality standards

#### Technologies:

- React, Next.js, TypeScript, Node.js, PostgreSQL, Express.js, Next Auth, Zod, Jest, GitHub Actions, Google Cloud Platform (GCP), Vercel

### **Frontend Developer, Wiserefunding | Apr 2022 – Jun 2024**

SME credit analytics fintech founded by Altman Z-Score creator, Dr. Edward Altman. Responsible for developing the frontend platform, while Wiserefunding developed the backend risk APIs with FastAPI.

- Created an AI evaluation framework to determine the accuracy and precision of OCR model during development
- Implemented advanced financial data visualisation, including packages like AG-Grid
- Created custom React hooks for data fetching and transformation, reducing complexity and redux usage
- Implemented comprehensive component and end-to-end testing using Jest and Playwright
- Technologies: React, Next.js, TypeScript, Node.js, Redux, Jest, Testing Library, Playwright

### **Full Stack Developer, Al Tayar Group | Jul 2023 – Dec 2023**

Al Tayar Group is a luxury retailer representing Jaguar, Ferrari, Prada, and Bloomingdale's in the Middle East. Primarily responsible for developing backend architecture and deployment of custom CMS for the internal communication platform.

- Architected full-stack solution with React frontend and Express.js backend deployed to AWS
- Implemented load balancing, providing 99.99% uptime, serving thousands of concurrent connections
- Technologies: React 18, Next.js, Node.js, Express.js, PostgreSQL, GitLab, Docker, AWS (EC2, S3, DocumentDB)

### **Full Stack Developer, deZaan | Jun 2022 – Present**

*Historic Dutch cocoa processor supplying global brands since 1911*

- Built high-performance web application using Gatsby (React-based) with 95+ Lighthouse scores
- Engineered CMS integration layer between Contentful API and frontend components
- Optimised build pipeline reducing generation time by 60% through incremental builds
- Technologies: React, Gatsby, Node.js, GraphQL, Contentful CMS, CI/CD pipelines

### **Full Stack Developer, Sports Icon | Jun 2022 – Jan 2023**

*NFT marketplace integrating with the Flow blockchain.*

- Built full-stack blockchain application with Next.js, integrating with multiple wallets (MetaMask, Dapper)
- Developed serverless API endpoints for smart contract transactions on the
- Created a responsive UI with Framer Motion animations and optimised asset loading
- Technologies: React, Next.js, Node.js, MongoDB, AWS Lambda, Flow blockchain

### **Relationship Manager, Seven Investment Management (7IM)**

**London, UK | Jul 2018 – Mar 2022 (3 years 9 months)**

Multi-asset investment manager with over £20 billion in assets under management. Solving real-world problems for the company led me to transition into my software development career.

- Managed £80m of investments and advised private clients as an FCA registered individual
- Took initiative to develop technical solutions to operational challenges alongside regular client duties:
  - > Built a client onboarding application, saving 1 month per year per relationship manager
  - > Developed VBA scripts to analyse tax across £12bn of assets, standardising and automating the procedures
- Promoted from Assistant Relationship Manager in May 2020 based on client management and technical initiatives
- Received the company innovation award for applying technical solutions to business problems

### **Senior Portfolio Manager, Dart Capital**

**London, UK | Jan 2016 – Jun 2018 (2 years 6 months)**

Private wealth management firm with £500 million under management. Primarily responsible for investment research and portfolio management for sophisticated investors.

- Oversaw the discretionary management of £100m of private client assets
- Identified opportunities to improve operational efficiency through technical solutions:
  - > Built Excel/VBA tools for cash management and trading
- Started self-directed learning in programming to solve day-to-day operational challenges

---

## EDUCATION

**B.Sc. (Hons.) Business, Oxford Brookes University** - 2:1 (Upper Second Class Honours)

**2010 - 2013**

- Awarded academic scholarship

**Wellington College, Berkshire** - A-Levels: 3 A grades

**2005 - 2010**

- Deputy Head of House and awarded arts colors
- 

## PERSONAL PROJECTS

**Flame & Bear, London UK | 2017 – Present**

Deployed multi-asset quantitative investment strategies in Python across equities, bonds, commodities, and cryptocurrencies.

- Started building systematic investment strategies as a hobby after meeting with quantitative fund managers at work
  - Developed profitable systems through reading academic research and implementing own hypothesis
  - Deployed strategies to the cloud, integrating with the brokerage, and a backend for storing performance data
  - Developed React dashboards for performance and risk monitoring across backend systems, brokerage, and strategies
  - Technologies: Python, Pandas, Numpy, Django, React, Next.js, PostgreSQL, AWS Lambda
- 

## PROFESSIONAL DEVELOPMENT

### Courses

- **Boot.dev** - backend focus covering data structures, algorithms, memory management, pub/sub, Docker, Kubernetes
- **Frontend Masters** - frontend focus covering testing, performance, CI/CD, design systems etc.
- **AI for Trading, Udacity** - quantitative trading and machine learning models for alpha generation

### Chartered Institute for Securities & Investment (CISI)

- Sustainable and Responsible Investment Certificate | Jul 2021
- Private Client Investment Advice & Management (PCIAM) - Level 6 | Jun 2019
- Investment Advice Diploma (Derivatives) - Level 4 | Dec 2015