Jonathan Furness

London, UK

GitHub | LinkedIn | Personal Portfolio

PROFESSIONAL SUMMARY

Full Stack Developer coding since 2017 with a primary focus on React, Node and TypeScript, complemented by strong Python experience. Passionate about developing interactive, user-friendly, and feature-rich web applications. Self-motivated and lifelong learner familiar with modern development practices and an expertise in finance. Started my development journey with Python for finance before specialising in modern JavaScript frameworks.

WORK EXPERIENCE

Senior Full Stack Developer, Antler Digital - London, UK

Apr 2022 - Present

Software consultancy delivering high-quality development services to startups and enterprise clients

Skills: React, Next.js, Node.js, Express.js, JavaScript, TypeScript, HTML, Tailwind CSS, Python, Stripe, PostgreSQL, Xata, MongoDB, GraphQL, Jest, React Testing Library, Amazon Web Services (AWS), Vercel, Docker

- Coordinated a team of engineers building projects using React, Next.js, Tailwind CSS and Node.js
- Planned sprints, conducted code reviews and collaborated with the team during pair programming sessions
- Designed monorepos for microservices, improving developer experience, reducing errors and increasing stability
- Implemented APIs and workflows with LLMs using LangChain
- Key Client Projects:
 - Wiserfunding, SME credit analytics fintech founded by Altman Z-Score creator
 - > Implemented financial data visualisation using AG-grid, Chart.js and state management with Redux
 - > Developed dynamic frontend using React and TypeScript, including a testing suite with Jest, React Testing Library and Playwright
 - o One Tribe, Sustainability SaaS specialising in carbon offsetting
 - > Implemented carbon emissions dashboard in React and event-driven microservices backend with Node.js
 - > Architected carbon emissions API, collaborating with ESG consultants and utilising Decimal is for precision
 - > Enhanced platform stability by implementing TypeScript, Zod validation, Jest testing, and Sentry error monitoring
 - > Managed migration of 1.5+ million records from legacy NoSQL databases to PostgreSQL with zero data loss
 - o Al Tayer Group, Luxury retailer representing Jaguar, Ferrari, Prada and Bloomingdale's in the Middle East
 - > Developed backend using Payload CMS and Express.js with a focus on security and scalability
 - > Built responsive frontend communications platform with Next.js and Tailwind CSS
 - > Deployed frontend and backend to Amazon Web Services (AWS) using EC2, Amplify, DocumentDB and S3, handling thousands of concurrent connections with load balancing and horizontal scaling
 - deZaan, Historic Dutch cocoa processor supplying global brands since 1911
 - > Developed 2,000 page SEO optimised multi-lingual Gatsby website
 - > Created React components with CMS schema to enable composable user interfaces
 - > Improved CI/CD pipeline by reducing build time by 60% through build optimisations
 - > Integrated Salesforce CRM enabling improved lead management for sales teams
 - o Sixty Secs, London based creative agency
 - > Migrated multiple websites from Wordpress to Next.js and Contentful CMS, resulting in simplified content management, faster load times and a complete reduction in hosting fees through Vercel
 - Herbert & Mason, Commodity Trading Advisor (CTA) specialising in energy markets trading
 - > Led development of systematic trading capabilities in Python, allowing for automated trading and backtesting
 - > Implemented test-driven development (TDD) and object-oriented programming to ensure robust and clean code
 - > Engineered Pandas data pipeline to transform raw futures price data into clean time-series for analysis
 - o Sports Icon, NFT marketplace integrating with the Flow blockchain
 - > Built NFT marketplace with Next.js and Algolia for efficient NFT indexing
 - > Integrated Framer Motion for animated UX and wallets (MetaMask, Dapper) for blockchain interactions

Relationship Manager, Seven Investment Management (7IM) - London, UK

Multi-asset investment manager with over £20 billion in assets under management

Skills: Python, Django, HTML, CSS, JavaScript, Visual Basic Application (VBA), Excel

- Pioneered the development of a client onboarding tool saving one month of time per Relationship Manager per year
- Created tools for compliance and tax management, reducing errors and improving client suitability metrics
- Managed £80m of investments and advised private clients as an FCA registered individual
- Created a multi-asset analytics dashboard using Python and Django
- Received awards for teamwork, innovation and a client-focused approach
- Promoted from Assistant Relationship Manager in May 2020

Senior Portfolio Manager, Dart Capital - London, UK

Jan 2016 - Jun 2018

Jul 2018 - Mar 2022

Private wealth management firm with £500 million under management

Skills: Python, Pandas, Numpy, Visual Basic Application (VBA), Excel

- Oversaw the discretionary management of £100m of private client assets
- Analysed large sets of financial data with Python, Pandas and Numpy
- Developed multiple internal tools for cash management and trading to improve portfolio management efficiency
- Researched fund managers and potential investment opportunities to include in client portfolios
- Traded equities, bonds and alternatives on secondary and primary markets

Pensions Consultant, Hargreaves Lansdown - Bristol, UK

Feb 2014 - Nov 2014

FTSE 100 listed investment brokerage with over £155 billion under administration

SKILLS

Languages: JavaScript, TypeScript, Python, Go, Rust Frontend: React, Next.js, Tailwind CSS, HTML, Redux

Backend: Node.is, Express, Python, FastAPI Database: PostgreSQL, MongoDB, DocumentDB **Testing:** Jest, Vitest, Testing Library, Playwright Cloud/Infrastructure: Amazon Web Services (AWS),

Docker, GitHub Actions, Sentry

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

Deputy Head of House and awarded arts colors

2005 - 2010

PROJECTS

Lead Developer, Flame & Bear

2017 - Present

Skills: Python, Pandas, Numpy, Django, React, Next.js, PostgreSQL, AWS Lambda

- Designed, developed and launched multi-asset automated trading strategies in Python
- Developed React dashboards for performance and risk monitoring across backend systems, brokerage, and strategies
- Implemented lambda functions to sync brokerage account and activity with the backend

PROFESSIONAL DEVELOPMENT

Courses

- Boot.dev backend focus covering DSA, Memory Management, Pub/Sub, Docker, Kubernetes
- Frontend Masters frontend focus covering testing, performance, CI/CD, design systems etc.
- Al for Trading, Udacity quantitative trading and machine learning models for alpha generation

Chartered Institute for Securities & Investment (CISI)

- Sustainable and Responsible Investment Certificate
- Private Client Investment Advice & Management (PCIAM) Level 6

Investment Advice Diploma (Derivatives) - Level 4

Jul 2021

Jun 2019

Dec 2015