Jed Walton

github.com/jedwalton

jedwaltondev@gmail.com
01865 589550

Experience

Golang, TypeScript, Python Development — Brighton, United Kingdom
Project — *October 2023 - November 2023*

- Implemented a File Q&A with Vector Databases, and OpenAI.
- Full-Stack Golang, TypeScript, Python, PostgreSQL and Weaviate Development.
- Integrated OAuth.
- Gained exposure to Micro-SaaS and product development.
- Implemented DX features, docker compose, live reloading, GitOps.

Golang Development — Brighton, United Kingdom
2 Week Project — *August 2023 - September 2023*

- QA techniques including Unit, Integration, and automated testing via CICD pipelines.
- Implemented GitOps, CI/CD via GitHub Actions, Docker, Automated PostgreSQL database backups, rollbacks, migrations, staging and production environments.

TypeScript Development — Brighton, United Kingdom
LucidFX AI Ltd — *March 2023 - August 2023*

- Dockerized state of the art video super resolution machine learning algorithms for deployment to production.
- Gained working knowledge of Kubernetes through a spike into viability of deploying on demand GPU clusters for inferencing SOTA Video Super Resolution Algorithms.
- Gained proficiency with Full-Stack TypeScript with tRPC, Nextjs.
- Designed and implemented a walking skeleton for a new product.

Full Stack Engineer — Brighton, United Kingdom
Bidlogix Limited — *September 2022 - March 2023*

- Full-Stack Java and TypeScript Development.
- Unit, Integration, End-to-End Testing with JUnit, Selenium, Cypress.
- CI/CD Tools including Bitbucket pipelines, CircleCI, Jenkins.
- Practiced Scrum Methodologies. Collaborated to size tickets, plan sprints, participate in daily standups and retrospectives.
- AWS services including S3, Lambda, CloudFormation, CloudWatch, DynamoDB.

Smart Contract Development — Remote
Freelance — *May 2021 - Sept 2021*

- Gained Web3 full stack web development experience with TypeScript, React, Hardhat.
- Gained proficiency in linux.
- Exposed to highly collaborative start up environments.

Customer Facing Employment — Oxford, United Kingdom
(18 Months Total) — *2015 - 2017*

- **The Bullingdon Venue**: 1 Month
- **M&S**: 8 Months
- **The Vaults & Garden Cafe**: 1 Month
- **Waitrose**: 7 Months
- **Walton Street Cycles**: 1 Month

Skills Summary

- **Languages**: Go, C, C++, Java, Python, SQL, TypeScript
- **Libraries & Frameworks**: Net/http, tRPC, Nextjs, React, PyTorch, Spring
- **Tools**: Git, Docker, MySQL, PostgreSQL, Weaviate, Neovim, tmux, i3
- **Platforms**: Linux, GCP, AWS, Github Actions, Jenkins, Bitbucket, CircleCI
- **Soft Skills**: Critical Thinking, Mentoring, Deep Work, Self-Direction

Education

- **JetBrains Academy** — Online
  Java Developer, Java Backend Developer — *Sept 2021 - August 2022*
  Relevant topics include:
  - Object-oriented programming
  - Generic programming
  - Functional programming
  - Spring Framework

- **University Of Sussex** — Brighton, United Kingdom
  BSc (Hons) - Computer Science and Artificial Intelligence; Degree Classification: 2:1 — *October 2018 - June 2021*
  Courses:

- Mathematical Concepts
- Programming Concepts
- Data Structures & Algorithms
- Compilers and Computer Architecture
- Software Engineering
- Further Programming
- Program Analysis
- Introduction to Programming
- Introduction to Computer Systems
- Fundamentals of Machine Learning
- Knowledge and Reasoning
- Neural Networks
- Natural Language Engineering
- Acquired Intelligence & Adaptive Behaviour
- Computer Vision
- The Ghost in the Machine?
- Databases
- Human-Computer Interaction
- Web 3D Applications
- Individual Project (Dissertation)

- **University Of Sussex** — Brighton, United Kingdom
  Computing Sciences Foundation Year — *October 2017 - June 2018*

  Courses:
  - Mathematics for Computing
  - Foundation Programming
  - Program Design
  - Database and Application Development
  - Communication and Learning Skills
  - Computing Project

- **Cheney 6th Form** — Oxford, United Kingdom
  A-Levels — *Sept 2015 - June 2017*
  Courses: Music, Physics, Computing

Projects

- **LucidFX**: Created a walking sketeleton to trigger state of the art video super resolution algorithms from the web browser, and inference models in the cloud. Conducted experiments to test the viability of deploying such a product.
- **FeatureExtractorPy**: Built a Prototype to Extract Parts List and Title Block from Mechanical Engineering Assembly Drawing PDF and output to CSV.
- **Ray Traced Reverberation Chamber - University Of Sussex - Dissertation 72/100, 1st.**: Completed an extensive piece system design and implementation work under the supervision of Dr Kingsley Sage. The project involved the creation of an artificial reverberation chamber using ray tracing techniques modelling the propagation of sound along with a variety of emulated microphones and a graphical user interface. Worked independently to a large extent, defined the problem boundaries, investigated possible solutions, and presented the results verbally, in writing, and demonstrated them in action.
- **Monopoly Spin-off, 'Property Tycoon' - University Of Sussex - Software Engineering group assignment 77/100, 1st.**: Undertook a team-based coursework, which involves the production of a significant software deliverable in the form of an interactive gaming application. Gained experience working on the whole life-cycle of a software product including: requirement analysis, software architecture and design, implementation, quality assurance, maintenance activities. Further gained experience with social issues in software engineering such as team-structures and conflict management. Other issues covered include: agile software engineering methods, testing, test-driven development, coding practice and standards, design and code reviews, version control.

Hobbies and Interests

- **Micro-SaaS**: Passionate about building small, profitable, and bootstrapped businesses.
- **Mentoring**: Enthusiastic about sharing knowledge and collaboration to move from A to B efficiently.
- **Drums**: Taught me the value of deliberate practice. Achieved grade 8 with distinction.
- **Lifting Weights**: Allows me to feel grounded and clear-headed. The discipline I have developed reduces perceived effort of cognitive work considerably.

References

- **Available on request.**