

Jed Walton

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EXPERIENCE

Software Engineer

1x2Network

Brighton, United Kingdom

January 2024 - Present

- Go, Java, Jenkins, Kafka, Redis, MySQL, PostgreSQL.
- Comfortable working in complex container orchestration environments.
- Kanban Atlassian software development with JIRA, Confluence, Bitbucket. Monday project planning.
- Introduced QA techniques including Unit, Integration, and End-to-End automated test suites to legacy code bases.
- Worked within cloud services including AWS and bare-metal Linux environments.
- Updated and maintained legacy codebases during migration to new systems.
- Experience using Loki, Grafana, and other observability tools in conjunction with bare-metal text file based logging leveraging CLI tools such as grep, zgrep to gather

insights and debug issues. Improved logging where insufficient.

- Interfaced with other teams and clients to provide technical support, gather requirements, provide updates on progress and deliverables including demos and documentation.
- Over 100K rows of database configuration updated successfully with MySQL to enable new features across thousands of active clients where technical documentation was missing and team unavailable to knowledge share in a heavily regulated environment.
- Introduced technical documentation including READMEs, Swagger docs, Confluence pages, JIRA tickets.
- Assisted in the onboarding of new team members.

Golang Developer

Freelance

Remote

October 2023 - November 2023

- Implemented a File Q&A with Vector Databases, and OpenAI.
- Full-Stack Golang and TypeScript Development.
- Integrated OAuth across the stack.
- Integrated Weaviate Vector Database with OpenAI embeddings using PostgreSQL data.
- Gained exposure to Micro-SaaS and product development.

- Implemented complex container orchestration with Docker Compose and live reloading.
- QA techniques including Unit, Integration, and Automated testing in CI.
- Implemented CI/CD Pipelines with GitHub Actions including automated PostgreSQL database backups, rollbacks, migrations, staging and production environments.

TypeScript Developer

LucidFX AI Ltd

Remote

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 the 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

Bidlogix Limited

Brighton, United Kingdom

September 2022 - March 2023

- Worked with large monolithic Java Spring Boot applications and Dockerized build environments.
- Scrum with Atlassian software development with JIRA, Confluence and Bitbucket including Daily Standups, Sprint Planning and Retrospectives.
- Gained working knowledge of Container Orchestration,

CICD Pipelines and QA techniques.

- Automated builds, deployments and load tests with a combination of Bitbucket pipelines and Jenkins.
- Developed features within AWS infrastructure including, DynamoDB, CloudWatch Log Insights, CloudFormation, S3, APIGateway.

Web3 Developer

Freelance

Remote

May 2021 - Sept 2021

- Gained Web3 full stack web development experience with TypeScript, React, Hardhat, Ethersjs, Solidity, MetaMask, and Infura.

- Gained proficiency in linux.
- Exposed to highly collaborative start up environments.

Customer Facing Employment

(18 Months Total)

Oxford, United Kingdom

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, Java, SQL, Python
- **Libraries & Frameworks:** Gin, Spring, gRPC
- **Tools:** Git, MySQL, PostgreSQL, Kafka, Redis, Docker, IDEA, Neovim, tmux, i3
- **Platforms:** Linux, GCP, AWS, Github, Bitbucket, Jenkins
- **Soft Skills:** Critical, Pragmatic and Reflective Thinking, Mentoring, Deep Work

EDUCATION

- **JetBrains Academy** Online
Java Developer, Java Backend Developer *Sept 2021 - August 2022*
Relevant topics include:
 - Object-oriented programming
 - Functional programming
 - Generic 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
 - Ray Traced Reverberation Chamber (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: Computing, Physics, Music

PROJECTS

- **Current Project Activity:** Up-to-date project activity available at github.com/JedWalton
- **LucidFX:** Created a walking skkeleton 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. Outputs of experiments available at <https://www.youtube.com/@drumlucidly>
- **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.**