Jed Walton

github.com/jedwalton

EXPERIENCE

Software Engineer

1x2Network

- Core technologies: Go, Java, Linux, SQL.
- Responsible for the maintaining the Central Admin System. This includes managing, debugging and fixing data pipelines with millions of records daily critical for business intelligence and invoicing.
- Introduced automated unit, integration, regression and E2E testing and Semantic Versioning.
- Implemented and maintained features across Java and Go code bases.

Golang Developer

Freelance

- 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.

TypeScript Developer

LucidFX AI Ltd

- 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

Full Stack Engineer

Bidlogix Limited

- 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.
- $\bullet\,$ Gained working knowledge of Container Orchestration,

Web3 Developer

Free lance

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

Customer Facing Employment

(18 Months Total)

• The Bullingdon Venue: 1 Month

• **M&S**: 8 Months

• The Vaults & Garden Cafe: 1 Month

Brighton, United Kingdom January 2024 - Present

- Migrated clients from legacy systems to new Go systems.
- Improved logging to generate actionable insights.
- Skilled in modern development practices such as Kanban, JIRA, Confluence, Bitbucket. Daily standups.
- Provided mentoring and guidance to new junior developers.
- Managed and Coordinated a small team of offshore developers to achieve high leverage in support activities.

Remote

 $October\ 2023$ - $November\ 2023$

- 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.

Remote

March 2023 - August 2023

Algorithms.

- Gained proficiency with Full-Stack TypeScript with tRPC, Nextjs.
- Designed and implemented a walking skeleton for a new product.

Brighton, United Kingdom September 2022 - March 2023

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.

Remote

May 2021 - Sept 2021

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

Oxford, United Kingdom 2015 - 2017

• Waitrose: 7 Months

• Walton Street Cycles: 1 Month

SKILLS SUMMARY

• Languages: Go, Java, SQL, C, Python

• Libraries & Frameworks: Gin, Spring, gRPC

• Tools: Git, MySQL, PostgreSQL, Kafka, Redis, Docker, JetBrains, nvim, vi, tmux

• Platforms: Linux, Mac, Github, Bitbucket, Jenkins, AWS, GCP

• Soft Skills: Critical, Pragmatic and Reflective Thinking, Mentoring, Deep Work

JetBrains Academy

Java Developer, Java Backend Developer

Relevant topics include:

- o Object-oriented programming
- Generic programming

Online Sept 2021 - August 2022

- Functional programming
- o Spring Framework

University Of Sussex

Brighton, United Kingdom October 2018 - June 2021

BSc (Hons) - Computer Science and Artificial Intelligence; Degree Classification: 2:1

Courses:

o Mathematical Concepts

o Programming Concepts

• Data Structures & Algorithms

o Compilers and Computer Architecture

o Software Engineering

o Further Programming

o Program Analysis

o Introduction to Programming

o Introduction to Computer Systems

o Fundamentals of Machine Learning

 $\circ\,$ Knowledge and Reasoning

o Neural Networks

o Natural Language Engineering

o Acquired Intelligence & Adaptive Behaviour

o Computer Vision

• The Ghost in the Machine?

o Databases

• Human-Computer Interaction

• Web 3D Applications

• Ray Traced Reverberation Chamber (Dissertation)

Brighton, United Kingdom October 2017 - June 2018

University Of Sussex

Computing Sciences Foundation Year

Courses:

o Mathematics for Computing

o Foundation Programming

o Program Design

- o Database and Application Development
- o Communication and Learning Skills
- Computing Project

Cheney 6th Form

A-Levels

Courses: Computing, Physics, Music

Oxford, United Kingdom Sept 2015 - June 2017

PROJECTS

- Current Project Activity: Up-to-date project activity available at github.com/JedWalton
- 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. Outputs of experiments available at https://www.youtube.com/@drumlucidly
- 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.

Hobbies and Interests

- $\bullet \ \ \mathbf{Micro-SaaS} \colon \mathbf{Passionate} \ \ \mathbf{about} \ \ \mathbf{building} \ \ \mathbf{small}, \ \mathbf{profitable}, \ \mathbf{and} \ \ \mathbf{bootstrapped} \ \ \mathbf{businesses}.$
- 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.