Lee Paul Johnson Wallace

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Professional Experience

Software Developer

Aug. 2021 – Present

Arm

Cambridge, UK

- Supporting the development of Arm's internal developer tools using Java (Spring), React and Python.
- Developing scalable microservices with Spring and Kubernetes.
- Accountable for the implementation of advanced testing methods in the Team's CI/CD pipelines, including Mutation Testing and Static Code Analysis.
- Configuring the monitoring and alerting infrastructure with AWS, Grafana and Prometheus.

Director / Software Developer

June 2020 - Present

Go Reg Go

Kent, UK

- Designed and built an online business that aggregates motor vehicle data for customers from restricted-access Driver and Vehicle Licensing Agency (DVLA) JSON API's.
- Integrates online payments using the Stripe Payments Processing API. Payments exceeding £3000.
- Built using Node.js, Express, Bootstrap, Apache Cassandra, Kubernetes and AWS.

EDUCATION

University College London (UCL)

London, UK

Master of Science in Software Systems Engineering - Distinction

Sept. 2020 - Sept. 2021

- Optional Modules: Networked Systems, Information Retrieval and Data Mining.
- Recent Project #1: Designing and implementing a DNS hierarchy using Python and Docker.
- Recent Project #2: Analysing topology of router network using Dijkstra's algorithm to evaluate the Open Shortest Path First (OSPF) protocol configuration parameters.

University of Greenwich

London, UK

Bachelor of Science in Business Information Technology - First Class Honours

Sept. 2016 - July 2020

- Optional Modules: Information Technology Planning, Database Management and Administration.
- Final Year Project: Received 1st class grade. Discovered a positive correlation between rising knife crime in London and falling youth budget cuts using statistical analysis.
- Frequently developed software using Java, JavaScript, C#, Oracle12c and MySQL.

Projects

Improving memory optimisation in Java | Java, Python, Azure

November 2020 – September 2021

- Empirically investigating the impact that Genetic Improvement algorithms may have on improving memory optimisation in Java applications, supervised by Dr. Justyna Petke.
- Several publications state that changing data structures in Java can produce optimisation gains, this project seeks to determine if genetic improvement tools can provide significant results for memory optimisation.
- Methodology: Compare GIN (Genetic Improvement Tool) against Trove, (a manual solution to improve memory optimisation) to see which technique provides faster or improved results.

Great Ormond Street Hospital Data Pipeline | Python, Neo4J, TravisCI, Azure September 2020 - April 2021

- Developing a custom patient data pipeline and graph database schema for GOSH, in order to facilitate recommended medication or treatment suggestions, enabled by machine learning for clinicians and doctors.
- Designed and programmed significant aspects of the pipeline, including the graph database schema and system architecture. Worked alongside Director of Data Science at KPMG, Dr. Rebecca Pope to achieve this.
- Hosted on Microsoft Azure with automated testing and continuous integration from Git using TravisCI.

TECHNICAL SKILLS

Programming: Confident using Java, JavaScript and Python

Systems: Linux (Ubuntu, Debian), Docker, Kubernetes, Bash, Raspberry Pi

Developer Tools: Git, AWS, Azure, Subversion, Jenkins, TravisCI, PyCharm, IntelliJ IDEA, Eclipse

Passing knowledge of Go, React, PHP and C.

Able to grasp new programming languages, frameworks, systems and APIs rapidly.