Lee Paul Johnson Wallace

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Education

University College London (UCL) London, UK

Master of Science in Software Systems Engineering - ***Predicted 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.

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.
- Configuring performant internal API behaviour and monitoring / alerting infrastructure with AWS, Kubernetes, Grafana and PagerDuty.
- Solely responsible for the design, and implementation improvement of Arm's internal continuous integration and deployment infrastructure.

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 £2400.
- Built using Node.js, Express.js, EJS, Bootstrap, MongoDB, Kubernetes and AWS.

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, 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, Kali), Raspberry Pi, Bash, Kubernetes, Docker
Developer Tools: Git, Subversion, AWS, Azure, TravisCI, Jenkins, PyCharm, IntelliJ IDEA, Eclipse

Passing knowledge of C, C#, PHP and React.
Able to grasp new programming languages, frameworks, systems and APIs rapidly.