Gabriel Magnus Wright

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Having graduated from the University of Warwick, I am currently focused on pursuing a career in software development. My academic background includes an MSc in Data Analytics (Distinction), and a BSc in Mathematics (First Class Honours). Over the last year I have dedicated myself to upskilling my Software Development skills. My primary programming proficiency lies in Java, where I have been actively developing personal projects familiarising myself with available frameworks like Spring Boot, and common build tools and packages such as Maven, Junit and log4j.

Projects

Full Stack Spring Boot WebApp (gabrielwright.xyz)
- Designed, developed and deployed my own user-friendly website for publishing articles and blog posts using Spring Boot for back end and Vaadin for front end.
- Integrated and communicated with a MySQL database using Spring Data JPA, streamlining data access to articles and ensuring efficient database operations.
- Implemented an API to enable safe live updates to the site, using Spring Security to secure authentication and protection against potential attacks.
- Ensured maintainability and extensibility of the web app, with consideration of aesthetics and functionality across devices.

Unity Multiplayer Party Game
- Working with a group of friends to develop a multiplayer party game, developed in Unity engine. Currently featuring 16 minigames in the beta stage, with a target of 20.
- Adhered to deadlines and task assignments based on group requirements, ensuring consistent progress for project timelines.
- Created documentation on notion with asset lists to support development and collaboration with artists.
- Organised playtests to gather feedback. New features are developed based on feedback maintaining a dynamic development loop.

Java 2D game Demo & Bank Statement Converter
- Developed a Java 2D game demo featuring graphics and GUI elements using Java's JFrame.
- Implemented Spatial Hash Mapping and A* pathfinding entities for optimised collision and entity navigation.

Bank Statement Converter - CSV/XLS to SQLite Databases
- Developed a Java application using JDBC to convert downloaded bank statements into SQLite databases.
- Transactions stored in SQLite databases can be converted to organised Excel documents.

Relevant Employment History

Support Engineer at Content Guru (November 2022 - March 2023)
- Initial point of contact for technical support in a Contact Centre as a Service (CCaaS) company.
- Classified and triaged problem tickets raised by clients.
- Acted as a liaison between clients and internal teams, translating technical jargon to non-technical stakeholders.
- Collaborated with multiple teams within the company, including Quality Assurance and Development, to escalate and resolve bugs raised through support tickets.
- Played a key role in the software support pipeline, compiling problem tickets, contributing to knowledge sharing and documentation, and enhancing team efficiency and client support.

Education

University of Warwick MSc in Data Analytics - Distinction (September 2021-September 2022)

Foundations of Data Analytics and Data Mining
- Studied techniques that enable a deeper understanding of patterns and structures within data. This included learning how to complete Statistic studies, Data Pre-processing and Machine Learning in Python.

Natural Language Processing (NLP)
- Learnt current applications and implementation of NLP such as in Sentiment Analysis, Information Extraction and Recommender Systems.

Algorithmic Game Theory
- Focused on the algorithmic and computational complexity aspects of game-theoretic models.

High Performance Computing (HPC)
- Provided a solid foundation in HPC including Shared memory programming (OPENMP) and Message passing programming (MPI) in C++.

Opinion Dynamics
- Completed my dissertation in the research area of Opinion Dynamics. Opinion Dynamics studies the transference or changing of states for agents in a given network and is used in Social Networking, Finance and Business.

University of Warwick BSc in Mathematics - First Class Honours (September 2018-July 2021)

Mathematical Analysis
- Developed appreciation for the construction of the fundamental parts of pure mathematics such as convergence, differentiation and integration.

Linear Algebra
- Learnt mathematical steps to linear programming, reducing problems to a system of simultaneous linear equations that can be solved through the application and manipulation of matrices and vectors.

Abstract Algebra
- Studied abstract algebraic structures, such as groups and rings and learnt how to manipulate them.

Mathematical Statistics
- Gained understanding on the main ideas of Statistical Inference and applied Statistical techniques, such as standard families of Probability distributions, Maximum Likelihood Estimation and hypothesis testing.

Stochastic Processes and Games, Decisions and Behaviour
- Learnt about simple Stochastic Processes and conditional probability, Markov Processes and normative decision theory.

Differential Equations
- Studied Differential Equations for use in both pure and applied mathematics. This included Ordinary Differential Equations, Difference Equations and Partial Differential Equations.

Part-time Employment History

Retail Assistant at Holland and Barrett (September 2023 - March 2024)
Bar Staff at Club 147 (July 2021 – September 2021)
Customer Assistant at Primark (July 2021 – September 2021)

Hobbies and Activities

- Whilst at the University of Warwick I was the TO (Tournament Officer) for Warwick Nintendo Society, a thriving university society of over 180 members. As TO I organised weekly university tournaments, biweekly tournaments that welcomed players from the rest of the Midland, and larger events that attracted strong players from around the UK. I undertook specific training for this role, particularly in Safeguarding Children and Active Bystander Intervention.
- I take an active interest in sports, fitness and enjoy regularly attending the gym, a hobby that keeps me fit and thinking clearly in all areas of my life.
- I am an active member of a book club with a wide group of friends that I met from university. I try my best to read around the content I consume and keep myself open to new ideas and genres.