

Gabriel Magnus Wright

Email: gabriel.magnus.wright@gmail.com

Mobile Number: 07502986034

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, where I achieved a Distinction, and a BSc (Hons) in Mathematics, where I earned First Class Honours. I have a strong dedication to finding effective solutions for new challenges and take pleasure in applying my mathematical and analytical knowledge to achieve this. My primary programming proficiency lies in Java, as I have been actively developing my personal projects in this language. However, I also possess practical experience in Python and C++ from my degree, as well as knowledge of C# from using unity within game jams.

Education

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

Examples of modules I studied include:

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 about 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. This involved NP-completeness of decision problems relating to set of equilibria and PPAD-completeness.

High Performance Computing (HPC):

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

Dissertation in 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/system. It has application in Social Networking, Finance and Business.

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

Relevant topics/modules include:

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.

Intro to 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 ideas related to it like 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.

Burgate School and Sixth Form Centre

A Level Qualifications	Grade
Mathematics	A*
Further Mathematics	A*
Religious Studies	A*

Previous Employment

Support Engineer at Content Guru (November 2022 – March 2023):

- Gained valuable insights into the inner workings of a tech company such as the company's infrastructure, processes, and workflows.
- Collaborated with multiple colleagues across different teams to provide technical solutions to our customers.
- Refined my communication and customer service skills while assisting clients with technical concerns.

Bar Staff at Club 147 (July 2021 – September 2021):

- Taking orders and serving drinks through table service with interest and efficiency.
- Assessing customer's concerns and preferences to enhance their experience.
- Working and communicating with colleagues to tend to the bar/club; keeping it well stocked and tidy.

Peer Tutor at University of Warwick (September 2019-December 2019):

- Tutoring first year mathematics undergraduates in Analysis.
- Reformulating problems from the module in approachable ways.
- Communicatively effectively with undergraduates to assess their understanding.

Personal Projects

Since leaving my role at Content Guru, I have been attempting to upskill my Software Development expertise by working through personal projects:

Bank Statement to Formatted Excel Output Converter (June – Aug 2023):

- Developed a command-line application in 100% Java, ensuring compatibility with JDK8+.
- Utilized JDBC to import bank statements into an SQLite database and developed the ability export the data into a specifically formatted .xlsx format.

Top-Down 2D Game Engine Development in Java (Aug 2023 - Ongoing):

- Currently engaged in a project focused on building a top-down 2D game engine using Java.
- Successfully integrated a basic game loop and introduced a tile-based spatial hashmap system to optimize game object collision management.
- Continuously expanding my skills in game development, problem-solving, and object-oriented programming.

Skills

- Exceptional mathematical literacy.
- Expertise in Opinion Dynamics research.
- Industry experience with Agile project management philosophy.
- Adept with Java Programming Language.
- Competent in Python and C++.

Hobbies and Activities

- While 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 internal university tournaments; biweekly university tournaments that welcomed players from the rest of the Midlands, and larger less regular tournament events that attracted players from all over the UK. I undertook specific training for this role, particularly in Safeguarding Children and Active Bystander Intervention.
- I actively participate in game jams where I work with others to create a video game within a short period of time. Currently, I am working with friends on a Unity-based party game project that we hope to finish before the end of the year.
- 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.