

PERSONAL SUMMARY

A committed and driven student at the University of Bristol studying mathematics and computer science. Proven written and verbal communication skills developed while working as a teaching assistant. Keen to develop further practical skills in software development to solve problems creatively.

EDUCATION

- University of Bristol** Bristol, UK
Mathematics & Computer Science MEng 2019 - 2023
 - First year:** Passed with mark of 84 (First Class)
 - Second year:** Passed with mark of 76 (First Class)
- The Sixth Form College Farnborough** Farnborough, UK
A Levels: Mathematics A, Further Mathematics A*, Computer Science A*, Physics A** 2017 - 2019
- Weydon School** Farnham, UK
11 GCSEs A- A, including Maths and English Language* 2012 - 2017

SKILLS

Languages Python, Java, Haskell, Javascript, HTML, CSS, C, R

Technologies Linux, Git, Github, \LaTeX , Maven, SciKit-learn, Jupyter

EXPERIENCE

- Teaching Assistant** Bristol, UK
University of Bristol Computer Science Department Sep 2021 - Present
 - Sole charge of teaching weekly problems classes to 2nd year Algorithms students
 - Supporting 2nd years studying Programming Languages & Computation with coding in Haskell and theory problems
- Committee Member** Bristol, UK
University of Bristol Cycling Club Mar 2020 - Present
 - Collaborated with others to organize and promote cycling events for University students
 - Contributing to club discussions on inclusivity within the sport
 - Helped to run club rides for members, complying with Covid rules, introducing new members to safe cycling in groups.

PROJECTS & COURSEWORK

- 3D Printing DLP Post Slice Supporter Group Project** github.com/JonathanMarriott/3DPrinting
Analyses sliced 3D models for unsupported areas and inserts supports for them
 - I implemented multi-threading in the Java based application using OpenCV Libraries to process large files over 3x faster than the sequential version
 - Developed within an agile team of 5 people, using git branching and merging to manage feature development
- Data Analysis Individual Project** github.com/JonathanMarriott/DataDrivenCS
Data Driven Computer Science Labs and Coursework
 - Used Scikit-Learn and NumPy libraries to implement maximum likelihood estimates, linear and non-linear least squares regression in practical examples. In addition to implementing some supervised and unsupervised learning models.
- Percolation Theory Research Project**
Individual research project on random graph percolation
 - Ongoing project involving reading current research literature for percolation, and proving results about critical phenomenon and phase transitions
 - Researching the applications of percolation theory to information flow through social networks and understanding the active paths through neural networks
- Quiz Website Coursework** github.com/JonathanMarriott/QuizCoursework
Individual project creating a website to serve quizzes to users
 - Implemented the quiz application backend in Java using an MVC architecture with an SQL database.
 - Webapp frontend developed using the Bootstrap framework to create a modern interactive interface

ACHIEVEMENTS & INTERESTS

Duke of Edinburgh Gold, Silver & Bronze Awards All Completed

ITC Level 3 Outdoor First Aid Qualified

Road Cycling Keen recreational cyclist who enjoys competing in time trial events

Electric Guitar Avid player for over 4 years