Daniel Marshall

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EDUCATION

UNIVERSITY OF SHEFFIELD
MComp in Computer Science
with Mathematics
Graduating Jun 2020

**LONGLEY PARK
SIXTH FORM COLLEGE**
A Levels
Mathematics A*
Further Mathematics A
Physics A
Chemistry A
Extended Project A*
Graduated Jun 2016

FIRTH PARK ACADEMY
GCSEs
5 A*s, 3 As, 2 Bs
Graduated Jun 2014

LINKS

Github:// **starsandspirals**
LinkedIn:// **starsandspirals**

COURSEWORK

CURRENT
Advanced Programming Topics
Automata, Logic and Computation
Devices and Networks
Advanced Calculus and Linear Algebra
Algebra
Analysis

PREVIOUS
Introduction to Software Engineering
Java Programming
Web and Internet Technologies
Algorithms and Data Structures
Mathematics Core
Numbers and Groups

SKILLS

LANGUAGES
Experienced:
Java • Ruby (Sinatra) • Haskell
Familiar:
HTML • CSS • JavaScript • Python

COURSE PROJECTS

CONNECT 4 | Java, Swing, JUnit
A game of Connect 4 coded in Java that can be played in the terminal or using a graphical user interface.
- Created a graphical user interface using Swing that allows a human player to make moves on the board.
- Coded an intelligent player using a min-max algorithm that can beat most human players.
- Used JUnit tests to ensure that the code for the game works in all possible situations.

PIZZAS R US | Ruby, Sinatra, SQLite, Cucumber
A website built with Sinatra and various Ruby gems that allows customers to order pizzas via Twitter.
- Worked in a team using agile development techniques like Scrum to efficently design and build a website.
- Created a system with models, views and controllers to store and display information about users and orders.
- Used Github to keep work organised between team members and allow us to work on different areas.

DOMINOES | Haskell
A system for representing domino boards and playing domino games and matches using Haskell.
- Created data structures and functions in Haskell to represent dominoes and play out domino games.
- Used functional programming techniques such as higher-order functions to create elegant code.
- Got a mark of 100 for impressive programming and good use of comments to explain my thinking.

SIDE PROJECTS

GETAWAY CLUB | Ruby, Sinatra, AWS
A website that generates random holiday destinations using the SkyScanner API, hosted on AWS and built for HackSheffield 3.0.
- Worked with a variety of REST APIs such as SkyScanner, Google Maps and Wikimedia to access and manipulate data.
- Used Amazon Web Services hosting to display and present our website to the hackathon organisers.
- Won a prize of $150 in Amazon vouchers to share between our team.

OTHER WORK

STAFF-STUDENT FORUM I am a member of the SOMAS Staff-Student Forum, meaning that students come to me with feedback about their lectures and tutorials and I feed back to the mathematics department, helping to solve various problems that students have.

STUDENT AMBASSADOR I am a DCS Student Ambassador, meaning that I help with running open days and weekend sessions for new students joining the university, helping the staff to run events efficiently and the students to become accustomed to university life.