# Charlie Street

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As a highly driven individual with a strong academic record, I throw myself into any challenge I am confronted with. With extra-curricular experience working in teams, I believe I can add value to any team-based project.

### Education

- University (2014-2018) Studying MSci Computer Science at the University of Birmingham.
  - Achieved average grades of 94%, 95% and 89.5% in my first 3 years respectively.
  - Won Best in Degree Programme 2014/15 and 2015/16.
  - Won BCS Prize for Best in Year 2014/15.
  - Awarded School of Computer Science Excellence Scholarship during first year.
  - Currently in my fourth year at University.
  - Completed modules in areas such as Functional Programming, Computer Security, Operating Systems, Machine Learning, Neural Computation and Robotics.
- A Level (2012-2014) Studied at the Thomas Hardye Sixth Form, Dorchester.
  - Achieved an A\* in A Level Maths, Physics and Computing. I also achieved an A grade in AS Further Maths and Chemistry.

### Technical Skills

#### **Programming Languages**

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C++ I have understanding of the class system and templates on top of the underlying C functionality.

**Haskell** I have a reasonable understanding of Haskell and the functional paradigm.

**Agda** I can formulate inductive proofs over basic numbering systems and data structures.

Java I have a strong level of proficiency, having used Java heavily during my time at university.

Python I have familiarity in Python, having made basic GUIs and small AI/robotics applications.

**OCaml** I have an understanding of the syntax and underlying concepts of the language.

**JavaScript** I possess basic knowledge of the language to add functionality to web pages.

## Web Technologies

HTML, CSS, XML, JSON I have enough knowledge of these to build basic, functional web pages.

#### Other

(Postgre)SQL I have the competency to define database entities and then query them.

Git I have experience using git, having used it for many of the projects I have partaken in.

LaTeX I have enough knowledge to produce clear and well formatted documents.

Matlab I can use Matlab to carry out a variety of mathematical/graphical functions.

# **Projects**

- Simulizer (2016-2017) A project initially undertaken for a second year module but continued since. Simulizer is a simulator and visualiser for a MIPS R3000 processor. Working in a team of 5, I was in charge of the back-end, requiring me to write a faithful simulation of the R3000 processor, including a primitive pipeline for execution. This has since been used as a significant teaching aid for the 'Computer Systems & Architecture' module at the University of Birmingham. Students had to write assignments in Simulizer; the assignments were graded using the software.
- Dating Chat-Bot for 'The Gadget Show' (2016) A project for the TV show to create a bot to partake in speed-dating. The goal was for an unknowing subject to choose the bot over a human. I led the back-end/AI sub-team; I was the majority contributor to the design and implementation of the bot. This forced me to think creatively while under time-pressure.
- Pedalo (2017) In September 2017 I was invited to Hack The North at the University of Waterloo, Canada's largest 'hackathon'. While there, I was part of the team who created Pedalo, providing certificate verification on the Ethereum blockchain. Pedalo was awarded the 'best use of blockchain' prize by ConsenSys.
- Hack The Midlands (2016/2017) In 2016 I was placed 2nd at Hack The Midlands for creating DanceAuth: authentication via the user's dance moves. At the same event in 2017 I was placed 3rd for creating Vox: a system that makes an electric guitar 'speak' using a text-to-speech engine.

# Extra-Curricular Interests And Experiences

- Duke Of Edinburgh Award I've completed all 3 levels of the DofE award scheme. This required large amounts of team-work and communication, particularly during expeditions, which involved working in a team of 4 for 4 days on Dartmoor. This greatly benefit my leadership skills. I also partook in voluntary work including working in a local charity shop and aiding restoration work along a canal near Gloucester.
- Music I am an avid musician, having played the guitar since the age of 12 with interest in many musical genres. This has required great commitment and perseverance. Previously, I have been lead guitarist/backing vocalist for a rock covers band. Being an active member of a band has improved my ability to cooperate well within a group and listen to those around me.

### **Additional Information**

• BCS I am currently a student member of the British Computer Society.

#### References

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