

Andrew Richardson  
email: [s1839679@ed.ac.uk](mailto:s1839679@ed.ac.uk)  
phone: 07510345458

## Education

I'm currently in my 4th year of the 5-year Masters of Informatics degree programme at the University of Edinburgh. So far, I'm on track for a first class degree. I graduated from Woodfarm High School after achieving A grades in all subjects studied, which includes 3 Advanced Highers.

## Interests

Ideally, I'd like to intern as a software developer this summer. It would be interesting to learn more about how one contributes to larger projects - and doing so in a professional context, with real impacts, would be an incredibly valuable experience.

I'd love to work on projects that involve graphics programming or analysing / visualising data, and I'd also welcome an opportunity to improve my skills with web development and cloud computing.

## Experience

I'd recommend viewing this website which concisely overviews some programming projects I've worked on: <https://abrichardson00.github.io>. In general, I also host code on Github.

I've recently enjoyed working on a neuroscience related honours project. It involves using dynamical systems to model how different types of neuron in the brain interact with each other, and I'm now investigating how these interactions can potentially produce real phenomena such as 'slow oscillations' of neuron activity observed in mammals. I'm developing this project further into a Masters thesis next year.

Last year I completed a system design project (for university) in a group of 8 people. We created an autonomous storage system which is controlled by a phone app (with voice control), takes photos and makes use of object recognition / text reading using the Google Vision API. I gained a lot of useful experience completing this sort of work in a team, and there were plenty of difficulties we overcame with communicating entirely remotely and working with simulations.

I have most notable experience with Java and Python. I'm very comfortable with NumPy, Matplotlib etc, and I also have experience with computer vision / image processing using OpenCV.

I've spent many years involved in Scouting, earning awards such as the Explorer Belt which involved a camping expedition in Canada. In my spare time I'm currently working for Edinburgh Tutors, teaching maths and computing science. I've also completed work for StudySquare, creating questions and study resources for numerous topics in Nat 5, Higher and A-level Maths.

## Hobbies

I enjoy playing music in my spare time, having played the violin for more than 10 years (achieving an ABRSM Grade 8 distinction) and learning piano / music theory. Throughout my high school education, I've played in different ensembles and have led the East Renfrewshire Schools Strings Orchestra - helping me develop some leadership skills needed with a large group like this. Being a member of the Edinburgh University Music Society, I have played in their symphony orchestra throughout university, continuing to develop my violin skills.

Over the past 6 years I've also taught myself the guitar and have enjoyed composing and recording music. I've developed skills with using computer software and hardware needed for music production, and as of recently, I'm enjoying making music in a band.

## References

Angus Chadwick (Honours Project Supervisor): [angus.chadwick@ed.ac.uk](mailto:angus.chadwick@ed.ac.uk)

Alicja McIntyre (Edinburgh Tutors): [alicja@edinburgh-tutors.co.uk](mailto:alicja@edinburgh-tutors.co.uk), 07917 454473

Tariq Elahi (University Personal Tutor): [t.elahi@ed.ac.uk](mailto:t.elahi@ed.ac.uk), 0131 651 3257