+44 (0) 7757 060046 jroutley@gmail.com github.com/jamesroutley

#### Education

#### 2011-2015, University of Oxford

Master of Engineering (MEng) (2:1)

Specialised in Software and Biomedical Engineering

Modules: machine learning, computer vision, optimisation and medical image analysis.

#### 2006-2011, St Paul's School

A Levels: Physics (A), Chemistry (A), Maths (A\*), Further Maths (B)

Arkwright Engineering Scholar

GCSEs: 10 A\*s, 1 A

## **Relevant Technical Experience**

#### 2014-2015, Automatic Flower Classification Application, University of Oxford Master's Project (high 1st)

Designed and developed an innovative Android application which can classify 102 common flower species to a practical accuracy of 96.2% by training computer vision and machine learning algorithms.

Gained familiarity with Android Programming by teaching myself the Android coding and design best practices.

Developed a front-end back-end classification architecture by setting up a Python server and designing an API.

Presented findings in a forty page report.

## 2013-2015, Designed and built websites for: Mind Your Head, Oxford Feminism in Theory and Action Conference, Bergamot and Black

Generated publicity for organisations I'm interested in by creating a web presence for them.

## 2014, MatLab report investigating regression techniques, University of Oxford Engineering Computation Project (high 1st)

Solved a complex problem by breaking it down into constituent parts and solving those by writing scripts.

Presented advanced mathematical and technical ideas in a clear manner.

# 2013-2014, Team leader of a design project to develop an intelligent software system to improve diagnosis and treatment of STIs in UK hospitals, University of Oxford Bachelor's Project (high 2:1)

Organised the team of four by dividing up tasks and applying time management techniques.

Designed a secure database system by considering encryption and scalability issues.

Presented findings in thirty pages of a 120 page report.

#### 2012-2014, Head of Online Media Presence at Mind Your Head

Oversaw a 150% increase in web readership by redeveloping the website to make it more intuitive, generating new content and by cultivating a larger social media presence.

#### **Additional Experience**

#### 2011-2015, Peer Supporter at the Oxford University Counselling Service

Helped people with problems ranging from exam stress to complex mental health issues by practicing active listening and assertive communication.

Oversaw a greater use of counselling services within my college by setting up drop-in sessions and increasing publicity of resources.

#### 2015, Founder of and chef at London dinner club Bergamot and Black (bergamotandblack.com)

Organise and cook fortnightly dinners, open to members of the public.

### 2014-2015, Bike mechanic and bike maintenance instructor at The Broken Spoke

Helped members of the local community learn about bike maintenance by teaching them the necessary skills.

#### 2014-2015, Private tutor at Blue Tutors. 2011-2014, Independent private tutor

Helped students pass GCSE and A level exams by teaching them maths, physics, chemistry and biology.

#### **Technical Skills**

Advanced: MatLab, Machine Learning, Computer Vision, Technical Communication

Intermediate: Java, Android Programming, Python, Web Development Technologies, Mobile and Web UI and UX

#### **Interests**

Physics, modernist literature, contemporary art, cycling, squash.