

# CHRISTOPHER RAUCH

+44 771 629 2939 ◊ [chrisrauch193@gmail.com](mailto:chrisrauch193@gmail.com) ◊ [chrisrauch193.com](http://chrisrauch193.com) ◊ [github.com/chrisrauch193](https://github.com/chrisrauch193) ◊ [in/chrisrauch193](https://in.chrisrauch193)

## EDUCATION

### University of St Andrews

*B.Sc. (Hons) in Computer Science (expected result - 1.1)*

September 2015 - June 2019

*Scotland, UK*

- Current GPA - 3.9/4.0, awarded Deans List.
- Executive Committee Member of University STACS Computing Society and member of the Rugby Team.

### Udacity

*Deep Learning Foundation Nanodegree Graduate*

March 2017 - July 2017

*Online*

- Gained experience using Normal, Convolutional and Recurrent Neural Networks. Additionally, I tested the capabilities of GANS.

## EXPERIENCE

### BBOXX

*Software Engineer Intern*

May 2017 - September 2017

*London, UK*

- Implemented device disaggregation to allow the company to see the exact power each device was dissipating for each customer.
- My work is instrumental to the company's success; their main business is providing solar power solutions.
- Used the full stack to inject my algorithm into the front-end analytics page. Technologies used: **Python, JavaScript, InfluxDB**

### University of St Andrews

*Undergraduate Researcher*

January 2017 - Present

*Scotland, UK*

- Researched recent Computer Vision and Machine Learning techniques for facial and emotion detection gaining extensive knowledge and hands-on experience in the area.
- Developed the full stack of a facial detection Android App using web sockets for communication between a Java front-end and a Python back-end. Technologies used: **OpenFace, OpenCV, Torch, SQLite**

### Down High School

*Software Engineering Mentor*

September 2014 - June 2015

*Downpatrick, UK*

- Mentored high school students in year 13 taking a Software Systems Development A-Level.
- Helped the students understand key concepts of the course as well as programming concepts.
- Worked through difficulties students faced in their coursework throughout the year. Technologies used: **C#, MySQL**

## ACHIEVEMENTS

- 2nd Place in Northern Ireland in the Software Systems Development A-Level 2015.
- Healy Cup for Computer Science (No. 1 Student in High School A2-Level in the field of Computing 2015).
- Computer Science Subject-Based Scholarship (University of St Andrews 2015).
- Runner up for the Adobe Prize Bursary for entrant Computer Science students at the University of St Andrews 2015.

## PROJECTS

### Deep Learning Projects

Personal Projects

- Generated my own Simpsons TV scripts using Recurrent Neural Networks.
- Trained my own sequence to sequence model to translate new sentences from English to French.
- Built and Trained a Convolutional Neural Network to classify images from the CIFAR-10 dataset.
- Technologies used: **Python, Jupyter, TensorFlow**

### SafeSesh

Hackathon Project

- Developed a Web App and Swift App that used the Monzo API to allow users to set spending limits on nights out.
- If the user went over said limit they would have to pass a reaction test game to be allowed to set a higher target.
- Technologies used: **HTML, CSS, JavaScript, Swift, Monzo API**

## TECHNICAL STRENGTHS

### Computer Languages

Java, Python, C, C#, JavaScript, Haskell

### Frameworks & Databases

TensorFlow, scikit-learn, MySQL, SQLite, InfluxDB

### Tools

Git, Emacs, Vim, L<sup>A</sup>T<sub>E</sub>X