# CHRISTOPHER RAUCH

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#### **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

March 2017 - July 2017

Deep Learning Foundation Nanodegree Graduate

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

#### EXPERIENCE

**BBOXX** 

May 2017 - September 2017

Software Engineer Intern

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

September 2014 - June 2015

Downpatrick, UK

- Software Engineering Mentor
- · 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 they were facing in their programming coursework throughout the year.

# **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.

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 Frameworks & Databases **Tools** 

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

TensorFlow, scikit-learn, MySQL, SQLite, InfluxDB

Git, Emacs, Vim, LATEX

Christopher Rauch