# **Andrew Connell**

## Graduate Statistician

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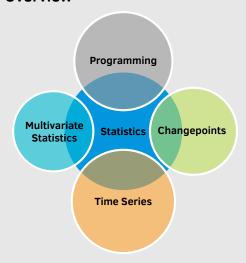
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# Technical Skills —

#### Overview



### **Programming**

 $0 \ LOC \longrightarrow 50000 \ LOC$  R • C • LETEX

JavaScript • Java • C++ • SQL

HTML • MATLAB • Python

## Education -

#### **BSc, Mathematics with Statistics**

FIRST CLASS (HONS) Lancaster University 2016 - 2019 | Lancaster, UK

MSc, Statistics (Theory and Methods)

Imperial College London 2019 - Present | London, UK

## References -

Dr. R Killick - Lancaster University

Prof. D Matteson - Cornell University

## **Experience**

## March 2018 - Team Leader - Enactus Lancaster

June 2019

- Enactus is an international non-profit organisation, led by students, which develops entrepreneurial skills in order to lift people out of poverty.
- The Team Leader role has enabled me to develop my understanding of the many different aspects of running a business such as project management, communication skills and using resources effectively.
- Led 80 students across nine projects, ensuring all projects were kept to schedule and beneficiaries were impacted through entrepreneurial action.
- Developed several social enterprises. Details can be found on my website.

#### Oct 2017 -June 2019

#### **Radio Presenter - The Atomic Fridge**

Bailrigg FM

Enactus

- Hosted a weekly university radio show interviewing guest speakers such as professors, lecturers and Ph.D. students to discuss their areas of research.
- 'The Atomic Fridge' won university acclaim.

### Sep 2016 -Sep 2019

#### Mathematics Ambassador & Lead Representative Lancaster University

- Throughout my undergraduate degree, I represented students at the faculty council where any serious issues were raised.
- · Represented the department and university on Open Days.
- Presented lectures and talks on student life at Lancaster, studying Maths and answering any subject specific questions the applicants had.
- In my final year, I was elected Lead Representative. This involved chairing meetings and resolving undergraduate and postgraduate issues.
- Since graduating, I have been invited back to present several talks on the benefits of pursuing a degree in Mathematics to future applicants.

#### Jul 2017 -Aug 2017

### **Robotics Teacher**

Tamwood

- Prepared and delivered lessons, designed assessments, wrote reports on pupil progress, and supported students studying away from home.
- Taught basic understanding of robotics and fundamentals of programming.
- Provided the students with the necessary materials and programming knowledge so they could design and build their own robots.

#### Nov 2016 -

#### Men's Welfare Officer

Cartmel College

Dec 2017

- · Helped students adjust to university: providing guidance and counselling.
- Supported students during the year with any difficulties they encountered.

### **Research & Publications**

May 2018 -

#### 3 - Google Summer of Code & R Project Developer

Goog

Aug 2018

**Thesis:** An exact online method for multiple changepoint detection for non-stationary data streams.

• Reached out to professional programmers and academics. Dr. R Killick and

- Reached out to professional programmers and academics, Dr. R Killick and Professor D Matteson, and with their guidance developed a computational based research project.
- Researched and developed statistical methods for changepoint detection.

#### May 2019 -Aug 2019

**Thesis**: Second Order Structure in the Changepoint Package.

- Added new functionality to the changepoint package that could detect changes in dependence using exact search methodology.
- The new change in second order structure algorithms include the commonly used AR(p) structure and changes in variance and autocovariance through the Locally Stationary Wavelet model.

There are two papers set to be published in the coming months for the changepoint package and the changepoint.online package. Please contact me should you wish to view the unpublished papers. A link to the code for each project can be found by viewing my GitHub.

### Other Skills & Information

Jan 2005 present Musician & Actor

- Play the Piano and several woodwind instruments, holding ABRSM grades for these instruments as well as music theory.
- Played in various concert bands at school, sixth form and university including Lancashire Youth Concert Band.
- Gold LAMDA award (distinction)

Jan 1998 present **Residency & Nationality** 

- Nationality: British
- Country of Residence: UK since birth.
- Fluency in English: Native Speaker.