

## Cillian Berragan

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[cjber.github.io/about](https://cjber.github.io/about)

[github.com/cjber](https://github.com/cjber)

Graduate in *Geographic Data Science* MSc from the University of Liverpool with a distinction (82%). I am currently searching for a job that will broaden my analytical knowledge and skills, and build on my passion for data science.

### Key Skills

**R:**

#### R Projects

- Data Analysis, Preprocessing, Statistics; tidyverse packages.
- Data Visualisation; ggplot2, sf packages, including spatial data.
- R Markdown Notebooks; Reporting results in a readable format.

**Python:**

#### Python Projects

- Deep learning; spaCy, keras packages, familiar with deep learning pipelines.
- Data Analysis; sklearn, pandas, numpy, geopandas packages.
- Data Visualisation; matplotlib, seaborn packages.
- Object Orientated Programming.

**SQL:**

- Database querying and relational algebra.
- Database Construction.

**QGIS & ArcGIS:**

- Client ready visualisations.
- Survey map produced for the Environment Agency.
- ArcMap Used professionally at TEP

**Additional Skills:** Regular Expressions, NLP,  $\text{\LaTeX}$ , R Markdown, Unix/Linux, Vim

**Written work:**

- Academic and professional reports.
- One written assessment during my MSc was awarded the highest grade in that module since the university program began (98%).
- Primarily use the Linux operating system with R Markdown or  $\text{\LaTeX}$  for written work in the Neovim text editor.
- Touch type at 80+ wpm.

## Education

- 2019 - present      *PhD Data Analytics and Society: **University of Liverpool***  
*Improving the Geolocation of Emergency Service Response through Big Data*  
Advanced NLP with spaCy, stanza python packages. Keras implemented neural networks, pretrained models and end to end pipelines.
- 2018 - 2019      *MSc Geographic Data Science (Distinction, 82%): **University of Liverpool***  
**Key Modules:** *Geographic Data Science, Social Survey Analysis, Database and Information Systems, Web Mapping and Analysis*  
I utilised advanced techniques for geospatial data analysis in both R and Python, as well as worked with the relational database management system MySQL during this degree. All assessments as part of this degree were awarded a distinction.  
**Dissertation:** *Utilising Supervised Parametric Classification to Assess the Quality of the UK Rural Road Network using Aerial LiDAR Data. (85%)*
- 2014 - 2017      *BSc (Hons) Coastal Marine Biology (First-Class, 74%): **University of Hull***  
**Key Modules:** *Independent Research Project, Geographic Information Systems, Environmental Impact Assessment*  
While this degree had a primary focus on coastal marine ecology it allowed me to develop a keen interest in statistical analysis, in particular through the use of the R software. I utilised R heavily in my undergraduate dissertation for which I received the prize for 'Best Dissertation' in my department.

## Employment

- 2018      *Graduate Ecologist: **TEP - The Environment Partnership***  
Daily tasks involved interacting with clients both over the phone and in person on site, preparing quotations for new ecological work and subsequently managing jobs that were accepted by clients. I worked with the ArcGIS software package to produce maps for professional use.

## Interests

PADI Rescue Diver with Dry Suit Qualification, at the end of 2017 I travelled around South East Asia and Western Australia logging over 40 dives.

I am interested in using R Markdown and  $\text{\LaTeX}$  to produce well formatted assessments for University and have produced an R Package containing various templates, hosted on my personal GitHub page. I am also passionate about contributing towards the open source programs I use and aim to assist as much as I can.

**Updated:** April 9, 2020