Cillian Berragan

Personal Details   cjberragan@gmail.com

07787796620

cjber.github.io

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.

Education

2018 - 2019   *MSc Geographic Data Science* (Distinction, 82%): **University of Liverpool**

Key Modules: *Geographic Data Science, Social Survey Analysis, Database and Information Systems*

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.

Dissertation: *Utilising Supervised Parametric Classification to Assess the Quality of the UK Rural Road Network using Aerial LiDAR Data.* (85%)

All assessments as part of this degree were awarded a distinction.

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.

Key Skills

R: Statistical and geospatial analysis and visualisation primarily with ggplot2 and other tidyverse packages. Regression modelling using demographic data. Remote sensed data including both LiDAR and Aerial Imagery.

Python: Statistical analysis, visualisation, machine learning techniques including k-means clustering, k-nearest neighbours and queen weighting spatial matrix's for geo-demographic classification and regionalisations.

MySQL: Database querying and how this relates to relational algebra. As part of this module I produced a Boyce Codd normalized database from scratch.

QGIS: At undergraduate level I developed an interest in QGIS in my spare time as an alternative to ArcGIS, covered as part of the degree. I have worked extensively in the past for both analysis and visualisation with this software but now focus more primarily on either Python or R. I produced a phase 1 habitat map for the Environment Agency for use in a habitat improvement project in the Tees Valley using QGIS.

ArcGIS: As part of my undergraduate degree I had the opportunity to work with this software for both visualisation and analysis and worked professionally during my time at TEP.

Writing: Produced a variety of academic written assignments for university and wrote professional environmental reports while working at TEP. A recent written assessment was awarded the highest grade in that module since the university program began (98%). I am experienced with office products as well as all Linux equivalents, however primarily use R Markdown to produce most assignments.

I can touch type at around 80+ wpm, and am very experienced using the *hyper-extensible* text editor *neovim*.

I have also developed an interest in GitHub, Linux and LaTeX in my spare time, in particular to produce and host *R* Markdown templates for university assessments, this CV was written entirely in LaTeX which in particular I am working to become more familiar.

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 LaTeX to produce well formatted assessments for University and have produced an R Package containing various templates, hosted on my personal GitHub page.

Very interested in computing in general, have built my own computer and custom keyboards. My text editor of choice, *neovim*, is a particular interest of mine, I enjoy finding new methods for improving my work flow.

Updated: March 30, 2020