
Mr. Luc Edward Wilson

Buckhurst Hill, Essex, IG9
M: 07947 985540, E: le.wilson0411@gmail.com

Objectives Focused, Problem Solver with an Interest in Machine Learning for Data Analysis.

Education

University of Bristol:

Geographic Data Science & Spatial Analytics MSc: (Predicted Distinction) **2023 – 2024**

- **Proposed Dissertation:** *"Predicting London House Prices using Geographically Weighted Neural Networks"*

Geography BSc (First Class Honours) **2020 – 2023**

- **Dissertation:** *"A Time Series Analysis of Water Quality using Weighted Regressions on Time, Discharge, and Season (WRTDS) at The River Piddle, Dorset"* (**First Class**)

Davenant Foundation School (Essex)

2013 – 2020

A-Levels: **A*A*A** (Mathematics, Geography, and Physics), AS-Level: Merit (Critical Thinking)

GCSEs: **2** 9s (Mathematics, English Literature) **5** 8s/A*, **4** 7s/A, **1** Merit

UKMT Senior Mathematical challenge: Gold Award

Skills

Data Analytics

- **Machine learning:** Neural-Networks; Random Forests; Decision Trees; KNN; KKNN; Logistic Regression; Cross-Validation; Bootstrapping.
- **Spatial statistics:** Geographically Weighted Regression (GWR) with Euclidean and non-Euclidean distances, and Nth Order Contiguity; Spatial lag models; Cluster Detection.
- **Network Science:** Degree Centralities; Accessibility Analysis; Spatial Networks; Gravity Modelling

Information Retrieval and Integration

- Knowledge Graphs; Natural Language Processing; Geoparsing; Disambiguation; Meta Data Retrieval, Criticism, and Construction; Database Management; Relational Databases; Quad-Trees; R-Trees; TF-IDF; APIs.

R

- **Advanced Level Proficiency:** Multiple Independent projects conducted in R including Undergraduate Dissertation (1st Class).
- **Extensive experience** using R script and R Markdown, publishing to HTML, PDF, .doc, GeoJSON etc.
- **Highly familiar** with packages such as Tidyverse (including ggplot2, dplyr and readr) and Caret (and associated packages such as rpart and randomForest).

Python

- **Proficient:** Multiple independent projects conducted in Python including Satellite Imagery Analysis, Computationally Efficient Data Cleaning, and Editing 2D Models.
- **Experienced** in a variety of packages such as: NumPy, Pandas, Scikit-learn, ISLP, Matplotlib, and Seaborn.
- **Highly familiar** with Jupyter Notebook, Jupyter Lab, and Spyder IDEs.

GIS

- Proficient in both **QGIS** and **ArcGIS**.
- Experienced in techniques such as: Map Generation, Overlay Analysis, Geostatistics, Spatial Interpolation, Proximity Analysis, Remote Sensing with Landsat 8 data.

SQL: Exposure to Data Querying, Database Schema Management, and Data Manipulation with SQL.

French: Conversational, Advanced Level Reading and Listening

Experience

Clarke Hillyer

Jul – Aug 2022

- Excel spreadsheet restructuring (data inputting, formulas, conditional formatting)
- Customer service (receiving calls and making calls)
- Administrative work (reading leases, invoices, accounts, post etc.)

Clarke Hillyer Internship	Jun 2022
- Data management (excel, inventory)	
- Cold Calling	
Bright Network Internship (lead sponsor EY)	Jun 2022
- Financial Services and Consulting	
- Sample assurance work from EY	
- Talks from sector leading companies such as Vodafone	
Summer Intern with Marex Spectron closing firm (07:30 – 18:00)	Jul – Aug 2019
- Day trading DAX Index	
Volunteering Epping Forest Heritage Trust	Jun – Jul 2023
- Conservation work	
Volunteering Silver Surfers Charity	2015 – 2016, 2018 – 2019
- Teaching elderly and vulnerable people use of technology	
- Acting as a consultant for other teachers	
Volunteering Beyond Our Selves Charity (in Zambia)	Oct 2018
- Fundraising	
- Visiting schools & running classes, home visits, interviews, and data inputting	
Mathematics tutoring (GCSE and KS3)	2018 – 2020
Sports Leadership Programme	2015 – 2017
- Operating sporting events at primary schools	

Courses

2023 Python Data Analysis & Visualization Masterclass (Udemy)	Jun – Aug 2023
Introduction to Python Programming (Udemy)	Jun 2023
Problem Solving with Excel (PwC)	Aug 2022
Data Driven Decision Making (PwC)	Jul 2022
Geopolitics of Europe (Institut d'études politiques de Paris)	2018 – 2019

Additional Information

Powerlifting: University of Bristol Varsity Team	2023 – 2024
Jikishin Jujitsu: National Champion (men's ground fighting)	2019 – 2021
Kickboxing: 2 nd Degree Blackbelt	2005 – date
Duke of Edinburgh: Bronze, Silver, Gold	2016 – date
Chess: Club and individual games in the Essex Adult league	2017 – 2020
Brazilian Jujitsu: Trained 4-6 hours per week	2016 – 2020
Other Sports: Intramural football, district athletics and swimming, badminton (5 years), YSA level 3 sailing	

Testimonium

<https://d.docs.live.net/0097389a0b76c57f/Documents/Careers/CVs/Luc%20Wilson%20-%20Reference.pdf>