Fast Track Data/AI Graduate Programme
Covering Letter

Roy Wilson

26 August 2021

My interest in data science was sparked when I attended a handful of intensive courses for the R programming language from Jumping Rivers funded by the Bangor Doctoral School. These courses provided an excellent introduction to the R statistical programming language aimed to train researchers to become 'advanced beginners'. The courses include an introduction to R, data manipulation, statistical modelling in R, R functional programming, and advanced graphics in R. These courses provided me with the confidence to interrogate data and extract meaning from data, as well as the confidence to explore packages on CRAN to discover what else I could do with the language. I went on to build a website in R using the blogdown package which can be found at RoyWilson.UK. This has proved useful in storing useful code snippets that I can easily share with others. I have also assisted my brother with his research into high entropy alloys by building an interactive dashboard in R shiny which calculates thermophysical properties and the thermal expansion coefficients of a selected alloy composition quickly and with ease for the user. This dashboard can be found at RoyWilson.UK/HEA/. I have also explored machine learning techniques found within the caret package and applied them to datasets from the TidyTuesday project and those found on Kaggle with success in building predictive models.

My background is in Accounting and Finance with an MSc (Distinction) and a BSc (First-class). The masters programme provided me with training and an appreciation for the philosophy of science, and a strong interest in working with data and applying statistical techniques. Data and statistical heavy modules include statistical methods, research methods, financial econometrics, among general mathematical applications within finance. I undertook maths at A level and have been enjoying refreshing and developing my mathematical ability since.

I am excited for the opportunity that this programme provides. It looks to be an excellent way to combine what I have learnt and my interests into an excellent foundation for a career in data science. What draws me to data science is its potential for life-long learning, where the data scientist is on the frontier of development of cutting-edge techniques and software packages.

I have also picked up practical skills in Python, and SQL throughout various courses. I really enjoy learning new tools as well as seeing what I can build with them.

I see myself finding a lot of success on the Data/AI Fast Track Graduate programme as it looks to offer a stimulating challenge in an area that I enjoy working in.

Sincerely,

Roy Wilson