019378 Q-Step Internship

COLLEGE OF SOCIAL SCIENCES SCHOOL OF SOCIAL & POLITICAL SCIENCES Management Professional & Administrative -GRADE 4

Job Purpose

Enhancing Social Science Students' Quantitative Literacy and Exposure with RShiny

A key objective of the Q-Step programme is enhancing quantitative literacy and exposure amongst social science students at the University of Glasgow. This project focuses this goal through the creation of R Shiny materials to be used by students in Level 1 and 2 courses in SSPS. R Shiny is a web-based interactive app that allows students to work with data manipulation without needing to know R code. R Shiny materials will use a handful of preprocessed datasets appropriate for each of the five subjects in SSPS. The app will allow students to work with and generate basic descriptive statistics, bivariate analysis, and data visualisation.

Main Duties and Responsibilities

As an intern, you will lead on the creation of the R Shiny materials with support from the Glasgow Q-Step staff. The materials will include measures of central tendency and dispersion, crosstabulations, Chi-Square tests, measures of association, and plotting relationships using ggplot. You will develop the R Shiny activities using pre-processed data appropriate for each subject.

- 1. You will contribute to the planning and design of the project. This includes working with Q-Step staff to identify relevant datasets and assist in selecting appropriate statistical tests and visualisations.
- 2. You will write R code for the analysis and visualisation. You will be adapting R code from a finished R Shiny app and ggplot2 manuals with assistance and supervision from Q-Step staff.
- 3. You will create the R Shiny materials. Using the R code, you will be responsible for the development of R Shiny apps including the creation of descriptive statistic and bivariate analysis, and data visualisations. You will be assisted and supervised by Q-Step staff particularly with finalising the R Shiny apps for use.
- 4. The successful candidate will be expected to work upon their own initiative but also as part of a team and able to meet deadlines as required

Knowledge, Qualifications, Skills and Experience Knowledge

A1 Knowledge of statistical analysis, including chi-square

A2 Participation in the Q-Step Programme

A3 An understanding of research methods

A4 SCQF level 5 or 6 (SVQ 2 or 3) or equivalent and experience of personal development in

a similar role or experience as detailed below.

Skills

- C1 Strong project management skills, be able to work as part of a team and independently
- C2 Excellent communication skills (written and oral) with the ability to communicate with a wide range of people
- C3 Ability to communicate material of a technical nature
- C4 Ability to take initiative and solve problems
- C5 Ability to multi-task and adapt to changing requirements
- C6 Ability to use the R statistical software package to analyse data
- C7 Ability to work with data sets, including cleaning databases
- C8 Willingness to learn new software packages

Experience

E1 Proficiency in statistical software programme R

E2 Proficiency in working with ggplot in R

Standard Terms & Conditions 7 hours a week, for 20 weeks Feb start Date