

UNSW Business School

Data analytics methods for mortality modelling and longevity risk management

Project Code: ACTL1

Project title

Data analytics methods for mortality modelling and longevity risk management

Supervisor

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Project summary

Data analytics is a rapidly growing area with a broad number of business applications. In particular, data analytics is viewed as the future of actuarial science. This project aims to apply methods from predictive data analytics to fit, compare and assess a range of mortality projection models. By focusing on the predictive power of the models a better assessment of the usefulness of the models for actuarial and financial applications will be provided as opposed to the current focus on explanatory features of the models.

Role of the scholarship holder(s) in the project

The scholarship holder will:

- Carry out a literature review of applications of data analytics to mortality modelling
- Assist in data collection and analysis of mortality and health status data

Assist with programming of code for implementing the models, in particular for calibrating and cross validation of models.

Required knowledge, skills and/or training

Potential applicants need to have a strong statistical and computing background.

Preference

We are looking for students with actuarial majors, and preference will be given to students who are interested in proceeding to Honours; Students with WAM ≥ 80 are encouraged to apply. Previous experience with R would be helpful but not necessary.

Work period

The work period may be broken into two parts as students will not be expected to work during the UNSW shutdown over Christmas/New Year.

Total work weeks: 8 weeks	The supervisors and the scholarship holder will discuss a mutually acceptable 8-week period over the summer term.
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How to Apply

Apply on the Scholarships website [here](#), using the scholarship code **UGVC1053**.

You will need:

- An electronic copy of your CV
- An electronic copy of your academic transcript
- The project codes and titles of up to three projects you'd be interested in getting involved in

The deadline for submissions is 4th October 2017.