

CEPAR Summer Scholarship Project Nomination Form 2018/19

Project title

Provide a short descriptive title of no more than 20 words.

Mortality modelling and forecasting based on Internet data

Supervisor (s)

Name:	Location:	Email:
Pengyu Wei	UNSW node	pengyu.wei@unsw.edu.au
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Project summary

The project will investigate mortality modelling from various data sources in addition to traditional datasets such as Internet search queries, news and social media, thereby facilitating the understanding of mortality trend on a timely basis. However, traditional mortality modelling relies on annual survey and demographic data that usually fall behind and provide limited information on drivers of mortality improvement. In contrast, the increasing use of Internet as a primary source of information makes the online activities valuable in understanding a variety of social and economic behaviours. We seek to incorporate Internet data in mortality modelling.

Role of the scholarship holder(s) in the project

- Review relevant literature on mortality modelling and the use of internet data in economics and social science
- Collect and clean Internet data related to the project
- Develop and assess models under supervision
- Assist with the preparation of manuscripts if applicable

Required knowledge, skills and/or training

- Knowledge of applied statistics and mortality modelling, or willingness to learn
- Competency in computing modelling techniques and data analysis skills with coding experience in one of the following languages, R, MATLAB, Python, or SAS
- Excellent communication skills
- Ability to work both independently and as a member of a team

Preference

(For example, you may wish to specify a minimum WAM, a preferred disciplinary background or state that potential applicants with an interest in pursuing an Honours program will be preferred)
Preference will be given to students who have undertaken the course ACTL2102 or equivalent

Work period

The work period may be broken into two parts as students will not be expected to work during any university shutdown period over Christmas/New Year. You may either specify dates the student

must be available to work over the summer period (i.e., to fit in with any leave you may have planned) or leave the exact dates open to negotiation with the successful applicant.

<p>Total work weeks:</p> <p><input type="checkbox"/> 4 weeks</p> <p><input type="checkbox"/> 5 weeks</p> <p><input type="checkbox"/> 6 weeks</p> <p><input type="checkbox"/> 7 weeks</p> <p><input checked="" type="checkbox"/> 8 weeks</p>	<p>Please tick one box</p> <p><input checked="" type="checkbox"/> Exact dates will be decided in consultation with the successful applicant</p> <p>OR</p> <p><input type="checkbox"/> The project must be conducted during the following period: --/--/-- to --/--/--</p>
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