



## Creating a better online world – Stemming the spread of online misinformation

### Contact details:

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### Topic

**We didn't sign up for this.** The Internet and social media were supposed to be connected sources of information, guaranteeing universal access to truth. Instead, we got drowned – with social media acting as its primary carrier, propaganda and misinformation spread more expansive than ever before. We are observing a flurry of damaging activity – from vaccine opposition groups riding a once-in-a-century pandemic to far-right groups pushing extremist and racial targeting content.

**The search for a solution.** The Australian government is investing significantly in understanding how online misinformation affects the cohesion of offline society. This project develops novel approaches for misinformation diffusion modelling and automated source validity quantification estimation. The goal is to understand what drives the adoption of misinformation and to counter it.

**How can you help?** The Behavioral Data Science lab is looking for several funded PhD students to join us to detect, model and counter online misinformation. We require a wide range of skills and interests. We look for (computational) social scientists to forensically investigate the sources and patterns of adoption. We require mathematicians and applied statisticians to develop the information spread models. We need machine learners and data scientists to deploy at-scale neural network technologies for language and image analysis.

**Why the Behavioral Data Science @UTS?** This project is part of a broader collaboration with US-based universities and companies. We offer a well-funded PhD research opportunity where you can develop cutting-edge technology and apply it to real-world data for social good. Behavioral Data Science provides an elite research environment with a supportive peer group of doctoral and senior researchers. We have collected and provided access to rich datasets to derive insights, real-world problems, and know-how. Behavioral Data Science has strong connections with industry and government, providing a testing bed for your research and career pathways post-graduation.

### You, the candidate

Interested candidates must have solid background knowledge in statistics, machine learning, and strong programming capabilities. Experience with big social data, extracting and handling web- and social media-originating data is a big plus. We are looking for a candidate with a master by research qualification and demonstrated research capabilities (preferably through publications). Candidates with publications in major conferences/journals will be prioritised. The position will be open until the ideal candidate is identified.

### How to apply

To apply, please send by email ([Marian-Andrei.RizoIU@uts.edu.au](mailto:Marian-Andrei.RizoIU@uts.edu.au)) the following documents:

- your CV, showing your education and professional experience, prizes (such as university medals etc), awards and publications if any;
- a cover letter (no more than one page), outlining i) your profile's match with the current subject, ii) your machine learning experience (example: describe one prior project involving Machine Learning) and iii) **why do you want to research online disinformation. Please be precise, not vague;**
- grades transcripts from undergrad and Masters;
- Masters thesis (if applicable) or equivalent **research thesis;**
- 3 referees (academic or industrial supervisors, co-authors): name, position and email;
- (if you have one) one of your publications **that is most relevant for this position.**