THE UNIVERSITY
OF QUEENSLAND
AUSTRALIA

CREATE CHANGE

Institute for
Social Science Research

Data Science Training for Public Managers

Brisbane: Monday, 9 March 2020 / Canberra: Thursday, 12 March 2020

Why use data science in the public sector?

- Many public sector organisations have increasingly rich and useful collections of administrative data.

- Integrated (linked) data along with data science tools can help Government services get to the right people, at the right place and at the right time - driving efficiency and impact.

- Data science tools can support complex decisions-especially where professionals might struggle to weight multiple factors under time and resource pressure.

- Data science allows high-quality information about cross-sector service interactions to inform our understanding of risk and protective factors.

- Data science methods may out-perform existing approaches to targeting services because they are bespoke for a population, and can draw on a wide range of cross-sector information.

- Data science developed tools, such as predictive risk models cannot replace human decision-making - but they can be a valuable aid to improve consistency and accuracy.

How do you formulate data projects that solve your organisation's strategic challenges?

At this one-day seminar hosted by the Institute for Social Science Research, University of Queensland international experts will equip participants with the knowledge to identify public problems that can be addressed using data science and formulate a project proposal.

Topics covered include problem identification and feasibility analysis, methodology (such as goals, type of data and analysis) and ethical data management (including privacy, transparency, social license and consent).

The course will be in workshop format with a mixture of presentations, discussion and practical exercises.

After taking this course, you should be able to:

- Understand how using data science can address your organisation's strategic priorities.
- Understand a framework to help scope data science projects at your organisation.
- Understand how a data maturity matrix can be used for self-assessment at your organisation.
- Understand how to identify potential ethical challenges and how to give consideration to the issues of privacy, transparency, discrimination, consent and social license.

Who should attend?

- Policy and operational managers at Director and Senior Manager levels
- Data owners

This program is restricted to Government agency Directors and Senior Managers. Participants will be required to do some background work before the course, including identifying a strategic project in their organisation that could benefit from a data science approach. Numbers are strictly limited to 25 participants.

Course dates and locations:

Brisbane: Monday, 9 March 2020, 9am - 5pm
UQ Institute for Social Science Research, 80 Meiers Road, Indooroopilly, Brisbane, Australia

Canberra: Thursday, 12 March 2020, 9am - 5pm
Forrest Hotel and Apartments, 30 National Circuit, Forrest, Canberra, Australia

Fees (incl. GST):

$1,200 per person
(includes course materials and full-day catering)

Expression of Interest / Registration:

In order to maximise value for participants we have limited registration for these courses. If you would like to attend, please complete the **Expression of Interest Form** by 5pm on Friday, 27 January 2020. Our facilitators will review all applications and inform you of the outcome by Friday, 31 January 2020.

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Presenters

Rhema Vaithianathan is a Professor of Social Data Analytics at the Institute for Social Science Research, University of Queensland. She is also a Professor of Economics at Auckland University of Technology (New Zealand) where she is the founder and Director of the Centre for Social Data Analytics. Rhema is internationally recognised for the implementation of machine learning tools in high stakes government systems, such as the Allegheny Family Screening Tool, a predictive risk model for child welfare call screening in Allegheny County, PA, USA.

María Paz Hermosilla is the Director of GobLab, the public innovation lab at the Universidad Adolfo Ibáñez School of Government, whose mission is to contribute to the transformation of the public sector through data science. She is the Academic Director of the Big Data for Public Policies diploma course, where she teaches ethical data management. Her area of expertise is public innovation, specifically how technology transforms the government, innovations such as Big Data, open data, crowdsourcing and laboratories.

Rayid Ghani is a Professor in the Machine Learning Department (in the School of Computer Science) and the Heinz College of Information Systems and Public Policy at Carnegie Mellon University. Previously, Rayid was Director of the Center for Data Science and Public Policy at the University of Chicago. Rayid is interested in using computation, data and analytics for solving high impact social good problems. He was Chief Scientist of the Obama for America 2012 campaign focusing on analytics, technology, and data.

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