

# CDMS Research Seminar

## Enabling AI for Digital Mental Health

Monday, 17th July 2023, 1:00 pm  
PS-EA.1.04

Speaker: Professor Jim Warren, University of Auckland, Aotearoa New Zealand

Abstract: There are many ways in which IT can support mental health. Such computer-based tools often cross the threshold into Artificial Intelligence (AI), and can also be seen as part of ‘consumer-health informatics’ where IT acts to empower individuals in their own care. This talk will present a range of mental health applications including patient-operated screening tools and chatbots that teach self-management skills. A key engineering question is how tightly to script app dialog, and where deep-learning based methods can safely be allowed to make decisions. Classification of user input, as compared to end-to-end response generation, is particularly promising. The presenter provides examples in the context of his research, mostly aimed at digital tools for mental health and resilience of teens.

Bio: Jim Warren is Professor Health Informatics at the University of Auckland, based in the School of Computer Science. He specialises in design and evaluation of information systems for long-term conditions, e.g. cardiovascular risk management. In recent years he has increasingly focused on screening and e therapy to support mental health of New Zealand youth. He is collaborating with a UK-based programme, “Adolescent Mental Health and Development in the Digital World,” on methods of personalization to promote adherence to mental health apps. He is a Foundation Fellow of the Australasian College of Health Informatics (now the Australasian Institute of Digital Health). His degrees are in Computer Science and Information Systems from University of Maryland.

Associate Professor Rodrigo N. Calheiros | Associate Dean, Research  
School of Computer, Data and Mathematical Sciences  
P: 9685 9135 | E: [r.calheiros@westernsydney.edu.au](mailto:r.calheiros@westernsydney.edu.au)

