MACQUARIE'S FRONTIER AI SEMINARS



MACQUARIE University SYDNEY-AUSTRALIA

MARK JOHNSON MACQUARIE UNIVERSITY

Large Language Models and the Changing Face of Computational Linguistics

Abstract:

Computational Linguistics has gone through major conceptual shifts from symbolic to machine learning approaches and the Deep Learning revolution. The surprising ability of Large Language Models (LLMs) to directly capture sentence and paragraph-length contexts – coupled with enormous training data and compute – enable them to supplant conventional NLP technologies for most practical applications. Large Language Models let us realise the slogans "Natural Language is the New Programming Language" and "Natural Language is the New Knowledge Representation Language", and the talk discusses the implications of this for research and applications.

Biography:

Mark Johnson is a Professor in the School of Computing at Macquarie University, Sydney, Australia, and Chief Al Scientist, Oracle Digital Assistant. He is also a former President of the ACL and SIGDAT, and former Editor in Chief of TACL.

Macquarie University Frontier Artificial Intelligence Research (FAIR) Centre launches the Frontier AI Seminar series for speeches on AI frontiers, recent advances, and best practices by researchers and practitioners in academia and industry. The Frontier AI Seminar series aims to promote cross-disciplinary AI research, innovation, engagement and applications, and bridge gaps between cutting-edge research and impactful applications in AI, data science, machine learning, and other relevant areas.



DATE: Monday, Oct 20, 2025

TIME: 2pm - 3pm

LOCATION: 4 Research

Park Drive, Level 2, 288,

Macquarie University

ZOOM ID: 81748223985

Password: 880036

mqai@mq.edu.au

