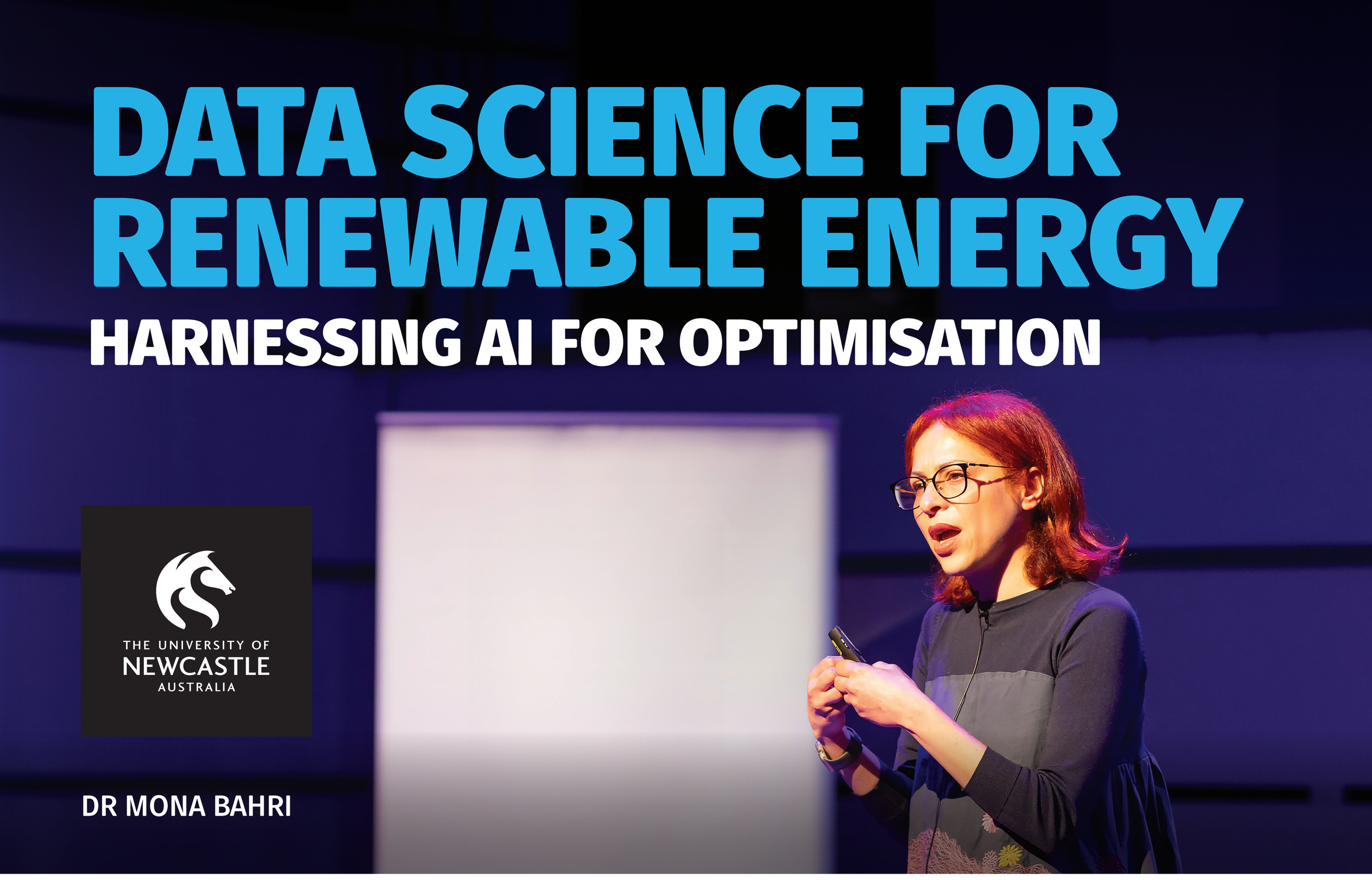
DATA SCIENCE FOR RENEWABLE ENERGY

HARNESSING AI FOR OPTIMISATION



THE UNIVERSITY OF NEWCASTLE AUSTRALIA

DR MONA BAHRI

Moving towards a greener future with Data Science and AI.

As climate change intensifies, renewable energy generation is critical to sustainability. Yet, its reliance on the unpredictable weather demands precise forecasting. Dr Mona Bahri's research has addressed this challenge leveraging AI. Her pioneering research uses AI to pinpoint weather patterns, ensuring wind, solar, and battery technologies thrive through optimized planning and production.

COMPETITIVE ADVANTAGE

- Four times more accurate than traditional methods
- Resilient through extreme weather events
- Cheap and fast to run.

PARTNERS

- Windlab
- Circular Economy Living Lab (CELL)
- SEC Victoria.

SUCCESSFUL RESEARCH APPLICATION

- Short-term forecasting offshore and onshore wind speed (5 min, 1 hr, 1 day ahead)
- Medium-term forecasting onshore wind (2 days, 1 week and 1 month ahead).

MORE INFORMATION

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