



TS. ZAABA AHMAD

Australia Malaysia Virtual PhD
Internship Program - 2023

Enhancing Classification of
Depression, Anxiety, and Stress
in Malay Social Media: A Gold-
Standard Corpus, Domain-
Specific Language Model, and
Deep Learning Approaches

Thesis Outline

My thesis develops a Malay-language social media corpus and deep learning models to automatically detect depression, anxiety and stress, addressing challenges like class imbalance, feature overlap, and model interpretability in low-resource natural language processing (NLP).

Supervisors & Institutions

Dr. Ruhaila Maskat

Universiti Teknologi MARA

Dr. Michael Ambrose

The University of Melbourne

Future Goals

To advance AI-driven mental health tools for low-resource languages, complete my PhD with impactful publications and contribute to interdisciplinary research bridging NLP, psychology, and public health in Malaysia and beyond.

AMVPIP Experience

I gained valuable mentorship from Dr Michael Conway, enhanced my research on Malay mental health NLP and presented my work at the symposium. The program strengthened my technical skills, publication output, and international collaboration.

Key Takeaways

- 1) Guidance from Dr Michael Conway at the University of Melbourne enhanced my technical skills and led to a formal co-supervisory role, strengthening the academic and international scope of my PhD.
- 2) The internship sharpened my skills in corpus validation, annotation and publication. I submitted a journal paper, explored advanced NLP methods and presented key findings at the AMVPIP Symposium.
- 3) Collaborating with Australian researchers and overcoming challenges built resilience, adaptability and confidence. It broadened my network and deepened my commitment to impactful, real-world research.