



TENGKU MUHAMMAD HANIS BIN TENGKU MOKHTAR

**Senior Lecturer/
Biostatistician/
Data Scientist**

ABOUT ME

I am a data enthusiast. My interest includes medical statistics and machine learning application.

RESEARCH PROFILE

H-index/Citations:

- Google Scholar: 8/178
- Web of Science: 5/87
- Scopus: 7/116

Publications summary:

Published more than 20 academic papers indexed in Scopus and Web of Science, 1 co-authored book, and 1 single authored book (preprint)

LANGUAGES

Malay (Native), English (Fluent), Arabic, (Basic)

SOFTWARE

- Statistics: R, Python, Jamovi, SPSS
- Sample size: G*Power

CONTACT

- tengkuhanismokhtar@unisza.edu.my
- tengkuhanismokhtar@gmail.com

REFERENCES

Prof Dr Kamarul Imran Musa (Universiti Sains Malaysia) - drkamarul@usm.my

MORE INFO

<https://tengkuhanis.netlify.app/>

WORKING EXPERIENCE

Universiti Sultan Zainal Abidin – Senior Lecturer

March 2025 – Present

Jom Research – Lead Academic Trainer

Aug 2023 – Present

Universiti Sains Malaysia – Graduate Research Assistant

Nov 2019 – Feb 2023

EDUCATION

Universiti Sains Malaysia

PhD (Public Health Epidemiology)

Feb 2020 – May 2024

Research: Prediction of breast cancer diagnosis using machine learning in Malaysia women

Universiti Sains Malaysia

MSc (Medical Statistics)

Sept 2017 – July 2019

Research: Relative survival and its prognostic factors of breast cancer patients in Kelantan from 2007 to 2011

Al-Azhar University

MBBCh (Bachelor of Medicine and Surgery)

Sept 2008 – June 2015

SELECTED PUBLICATIONS

Research Papers:

- 1) Developing a supplementary diagnostic tool for breast cancer risk estimation using ensemble transfer learning — Diagnostics
- 2) A review of federated learning technology and its research progress in healthcare applications — Applied Intelligence
- 3) Over-the-counter breast cancer classification using machine learning and patient registration records — Diagnostics
- 4) Diagnostic accuracy of machine learning models on mammography in breast cancer classification: a meta-analysis — Diagnostics
- 5) Bibliometric analysis of global research activity on premature mortality — Healthcare
- 6) The burden of premature mortality from cardiovascular diseases: a systematic review of years of life lost — PLOS ONE
- 7) Net survival differences of breast cancer between stages at diagnosis and age groups in the east coast region of West Malaysia: a retrospective cohort study – BMJ Open
- 8) Risk factors for COVID-19 mortality in Malaysia — Malaysian Journal of Medical Sciences

Books:

- 1) Data analysis in medicine and health using R (published by CRC Press)
- 2) R essentials: a beginner's guide to data analysis (preprint)

WEB APPS

- 1) ShinyBC: breast cancer risk estimator [Available at: <https://tengku-hanis.shinyapps.io/shinyBC/>]