# Ahmad Hakiim Jamaluddin

Ph.D. in Mathematics and Statistics

UNSW Data Science Hub (uDASH) | School of Mathematics and Statistics

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#### Education

- 2021–2025: Ph.D. in Mathematics and Statistics, UNSW Sydney, Australia.
- 2017–2019: Master of Science, Statistics, Universiti Utara Malaysia (UUM), Malaysia.
- 2012–2016: Bachelor of Science with Honours, Industrial Statistics, UUM, Malaysia (1st Class Honours, CGPA: 3.87/4.00).
- 2011–2012: Malaysian Matriculation, Pure Sciences (Mathematics, Physics, Chemistry, Biology), CGPA: 4.00/4.00.
- 2009–2010: Malaysian Education Certificate (SPM), Pure Sciences, Grade: 7A+, 2A.

### **Recent Achievements and Involvement**

- 2025: Nominated for the Outstanding PhD Theses Award, UNSW Sydney.
- 2025: Academic Peer List, Department of Mathematics, Universitas Airlangga, Indonesia.
- 2025: Leader, Education Sector, AI Talents Working Group, National AI Office (NAIO), Ministry of Digital Malaysia.
- 2025: AI Associate Researcher, Hospital Kajang, Malaysia.
- 2025: AI Associate Researcher, Malaysian Health Technology Assessment Section (MAHTAS), Ministry of Health Malaysia.
- 2025: Mentor, UNSW Sydney team, SAS Curiosity Cup.
- 2024: Mentor, UNSW Sydney team, EY Joint Actuarial Case Competition.
- 2023: Organising Committee Member, Mathematics and Statistics UNSW Postgraduate Conference.
- 2021–2023: Session Chairperson, Mathematics and Statistics UNSW Postgraduate Conference.
- 2023: One-Minute Thesis, Postgraduate Research Showcase, Best for School of Mathematics and Statistics, UNSW Sydney.
- 2023: CHUBB Data Hackathon, CHUBB Insurance Australia Limited, 1st Runner-Up.
- 2023: Innovator Pro Artificial Intelligence Competition, UNSW Sydney, 2nd Runner-Up.
- 2023: Think-Tank Artificial Intelligence Policy Competition, University of Sydney, 2nd Runner-Up.

# **Awards and Scholarships**

- 2021–2025: Ph.D. Mathematics and Statistics Scholarship, Ministry of Higher Education Malaysia.
- 2021: Perdana Fellowship, Ministry of Youth and Sports Malaysia.
- 2021: Statistical Data Science Winter School Scholarship, AMSI.
- 2021: Conference on Artificial Intelligence & Data-Driven Innovations (AIDDI2021) Scholarship, MSORSM.
- 2019: Statistics (Data Science) Young Academic Scheme Award, Universiti Putra Malaysia.
- 2016: Chancellor Gold Medal Award (Best overall undergraduate student), UUM.
- 2016: Vice Chancellor Gold Medal Award (Best Industrial Statistics undergraduate student), UUM.
- 2016: 1st Place, Internship Project, "Unstructured Data Analytics for Marketing Analytics," UUM.
- 2016: 1st Place, Final Year Project, "Shrimp Quality Management," UUM.
- 2012–2016: Dean's List Award, UUM.
- 2012–2016: Undergraduate Scholarship, Ministry of Higher Education Malaysia and UUM.
- 2014: Excellent Service Award, UUM Student's Representative Council.

# **Leadership Experience**

• National AI Office Malaysia (NAIO) (March 2025 – June 2025)

Education Sector Lead, AI Talent Working Group, Malaysia.

• Office of Minister, Prime Minister's Department, Malaysia (October 2021 – November 2021)

Perdana Fellow (Economy), Putrajaya, Malaysia.

Mentored by Ministry of Economy, YBM Dato' Sri Mustapa bin Mohamed.

• Universiti Utara Malaysia (2013 – 2014)

Faculty Representative to Student's Representative Council.

President of Quantitative Sciences Association.

• Malaysian High School (2010)

President of Mathematics Society.

President of School Teenage Cadet.

## **Professional Experience**

• Universiti Putra Malaysia (October 2019 – Present)

Young Academic, Department of Mathematics & Statistics, Selangor, Malaysia.

• UNSW Sydney (March 2022 – Present)

Research Officer, School of Mathematics and Statistics (July 2025 – Present).

Casual Academic (Statistics for Social and Life Sciences), School of Mathematics and Statistics (March 2022 - Present).

Casual Academic (Health Data Science), School of Biomedical Sciences, Sydney, Australia (March 2023 – 2024).

Project Advisor (Work Integrated Learning, WIL), Collaboration with SAS Institute Australia (August 2024 – November 2024).

Assistant Consultant, StatsCentral, Mark Wainwright Analytical Centre (May 2022 - December 2022).

Casual Staff, School of Education (March 2022 – December 2022).

• University of Technology Sydney (July 2024 – October 2024)

Casual Academic (Marketing Research Methods), Business School, Sydney, Australia.

• Canterbury Institute of Management (February 2024 – June 2024)

Casual Lecturer (Business Statistics), School of Business, Sydney, Australia.

• Macquarie University (February 2022 – May 2022)

Casual Academic (Probability and Statistics), School of Mathematical and Physical Sciences, Sydney, Australia.

• Monash University Malaysia (January 2019 – January 2020)

Casual Staff (Research Methodology), School of Business, Kuala Lumpur, Malaysia.

• Universiti Utara Malaysia (2016 – 2019)

Associate Fellow, Centre for Testing, Measurement & Appraisal, Kedah, Malaysia.

• RHB Banking Group (2018)

Technical (Analytics) Accountant, Kuala Lumpur, Malaysia.

• Osram Opto-Semiconductors (M) (2016)

CIM Engineer, Penang, Malaysia.

## **Presentation Experience**

- SupercomputingAsia (SCA), Sydney, Australia, Symbolic Data Analysis, 2024.
- Early Career & Student Statisticians Conference (ECSSC), Christchurch, New Zealand, Bayesian Gaussian Mixture Models via Symbolic Data Analysis, 2024.
- Australian Data Science Network Conference (ADSN), Perth, Australia, Optimal Designs for Univariate Histograms, 2024.
- UNSW Science Postgraduate Research Showcase, Sydney, Australia, Optimal Designs for Univariate Histograms, 2023–2024.
- Malaysia Hall Sydney Open Day, Sydney, Australia, Data Science, What, Why and How, 2024.
- MathStats Postgraduate Conference, Sydney, Australia, Symbolic Data Analysis Advances, 2021–2022.
- AgriVoltaics 2020, Perpignan, France, Machine Learning for Agrivoltaic in Malaysia, 14 October 2020.
- Social Enterprise for Individuals with Autism, Malaysia, Systematic Review of Social Entrepreneurship, 22 August 2019.
- TEDxUUM, Malaysia, TEDx Speaker, Statistics, Why and How 13 March 2018.

### **Computer Skills**

- Quantitative Software: R, Python, SQL, SAS, RapidMiner, SPSS, AMOS, SmartPLS, ADANCO, HLM, Review Manager.
- Qualitative Software: NVivo, QDA Miner Lite.
- Documentation Software: LaTeX, MS Office.

### **Workshops and Certifications**

- Sydney Workshop on Mathematics of Data Science, School of Mathematics and Statistics, University of Sydney, 2024.
- Python Workshop, School of Mathematics and Statistics, UNSW Sydney, 2021.
- Review Manager (Meta-Analysis), Monash University Malaysia (Clinical School), 2019.
- NVivo, StatsWork, 2019.
- SmartPLS & AMOS, MPWS, 2018.
- SAS (Programming, Enterprise Guide & Enterprise Miner), SAS Institute, 2018, 2016.
- **R**, DataCamp (MDEC), 2016.

### **Professional Involvement**

- UNSW AI Institute, Fundamental Data Science Team, Member, 2025 Present.
- UNSW Data Science Hub (uDASH), Fundamental Data Science Team, Core Member, 2021 Present.
- Royal Statistical Society (RSS), Student Member, 2023 Present.
- Statistical Society of Australia (SSA), Student Member, 2022 Present.
- Society for Industrial and Applied Mathematics (SIAM), Student Member, 2023 Present.
- Perdana Fellow Alumni Association (PFAA), Member, 2021 Present.
- Malaysia Board of Technologies (MBoT), Member, 2021 Present.
- Institut Statistik Malaysia (ISM), Member, 2020 Present.
- Persatuan Matematik dan Sains Malaysia (PERSAMA), Member, 2020 Present.
- Management Science/Operational Research Society of Malaysia (MSORSM), Member, 2020 Present.

### **Publications**

### Artificial Intelligence

• **Jamaluddin, A. H.**, Jamaluddin, F., Jamaluddin, F., & Jamaluddin, F. (2025). Malaysia's AI-driven education landscape: Policies, applications, and comparative insights for a digital future. *STEM Education*. Manuscript submitted for publication.

#### **Statistics**

- **Jamaluddin, A. H.**, & Mahat, N. I. (2020). Validation assessments on resampling method in imbalanced binary classification for linear discriminant analysis. *Journal of Information and Communication Technology*, 20(1), 83–102.
- **Jamaluddin, A. H.**, & Mahat, N. I. (2019). The effects of resampling methods on linear discriminant analysis for data set with two imbalanced groups: An empirical evidence. *Advances and Applications in Statistics*, 59(1), 17–42.

## Applied Statistics

- Othman, N. F., Ya'acob, M. E., Lu, L., **Jamaluddin, A. H.**, Mat Su, A. S., Hizam, H., Shamsudin, R., & Jaafar, J. N. (2023). Advancement in agriculture approaches with agrivoltaics natural cooling in large scale solar PV farms. *Agriculture*, 13(4), 854.
- Anuar, N., **Jamaluddin, A. H.**, & Abu, A. Y. (2023). Imagery as alternative therapy of depression: A systematic literature review (SLR). *Journal for ReAttach Therapy and Developmental Diversities*, 6(9s2), 105–112.
- Roslan, N., Ya'acob, M. E., Jamaluddin, D., Hashimoto, Y., Othman, M. H., Iskandar, A. N., Ariffin, M. R., Ibrahim, M. H., Mailan, J., **Jamaluddin, A. H.**, Mail, M. F., Aliah, B. S. N., & Lu, L. (2021). Dye-sensitized solar cell (DSSC): Effects on light quality, microclimate, and growth of *Orthosiphon stamineus* in tropical climatic condition. *Agronomy*, 11(4), 631. https://doi.org/10.3390/agronomy11040631
- Othman, N. F., Ya'acob, M. E., Mat Su, A. S., Jaafar, J. N., Hizam, H., Shahidan, M. F., Jamaluddin, A. H., Chen, G., & Jalaludin, A. (2020). Modeling of stochastic temperature and heat stress directly underneath agrivoltaic conditions with *Orthosiphon stamineus* crop cultivation. *Agronomy*, 10(10), 1472. https://doi.org/10.3390/agronomy10101472
- Jamil, N. S., Ahmad, M., & **Jamaluddin, A. H.** (2021). Tensile properties of natural fibre reinforced polymer composite foams: A systematic review. *Journal of Advanced Industrial Technology and Application*, 2(1), 28–35.

### Systematic Review

- Anuar, N., **Jamaluddin, A. H.**, & Abu, A. Y. (2023). Imagery as alternative therapy of depression: A systematic literature review (SLR). *Journal for ReAttach Therapy and Developmental Diversities*, 6(9s2), 105–112.
- Jamil, N. S., Ahmad, M., & **Jamaluddin, A. H.** (2021). Tensile properties of natural fibre reinforced polymer composite foams: A systematic review. *Journal of Advanced Industrial Technology and Application*, 2(1), 28–35.