Mohamed Reda Bouadjenek – Ph.D, FHEA

Contact

Address:	Deakin University, School of Information Technology
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Interests

Machine Learning, Deep Learning, Information Retrieval, AI Ethics, AI and Law, Social Network Analysis, Recommender Systems, Databases, Data Quality, and Data Analysis.

Education

Deakin University, Geelong, Australia
  Graduate Certificate of Higher Education for Learning and Teaching (Jun. 2021)

University of Paris-Saclay, Versailles, France
  Ph.D., Computer Science (Dec. 2013)
- Supervisors: Mokrane Bouzeghoub and Hakim Hacid
- Research Field: *Information Retrieval and Machine Learning*

University of Paris-Saclay, Versailles, France
  M.S., Computer Science (Sep. 2009)
- Supervisors: Mokrane Bouzeghoub
- Major: *Databases and Distributed Information Systems*

University of Sciences and Technology Houari Boumediene, Algiers, Algeria
  B.S., Computer Science (Jun. 2008)
- Major: *Databases and Information Systems*

Employment

Deakin University, Geelong, VIC, Australia.
- *Senior Lecturer*, Applied Artificial Intelligence.   **Jan. 2024 –   Present**
- *Lecturer*, Applied Artificial Intelligence.   **Nov. 2019 – Dec. 2023**
- Co-leading the **Machine Learning for Decision Support Group**.

University of Toronto, Toronto, ON, Canada.   **Nov. 2017 – Oct. 2019**
- *Research Fellow.* Supervisor: Scott Sanner.

The University of Melbourne, Melbourne, VIC, Australia.   **Sep. 2015 – Sep. 2017**
- *Research Fellow.* Supervisor: Karin Verspoor and Justin Zobel.

Oregon State University, Corvallis, OR, USA.   **Jul. 2015 – Aug. 2015**
- *Visiting Researcher.* Supervisor: Scott Sanner.

INRIA, Montpellier, France.   **Jan. 2014 – Jul. 2015**
- *Postdoc Researcher.* Supervisors: Esther Pacitti and Patrick Valduriez.

UCSB, Santa Barbara, CA, USA.   **Nov. 2014 – Dec. 2014**
- *Visiting Researcher.* Supervisor: Amr El Abbadi.

NICTA, Canberra, ACT, Australia.   **Aug. 2013 – Dec. 2013**
- *Visiting Researcher.* Supervisor: Scott Sanner.

Alcatel-Lucent Bell Labs, Nozay, France.   **Mar. 2010 – Mar. 2013**
- *Research Engineer.* Supervisor: Hakim Hacid.

DAVID Lab, University of Paris-Saclay, Versailles, France.   **Apr. 2009 – Sep. 2009**
- *Master Student Internship.* Supervisor: Mokrane Bouzeghoub.

Professional Qualifications	• **Fellow of the UK AdvanceHE, formerly the Higher Education Academy (FHEA, 2023-).** Fellowship reference: *PR258414.* Awarding body: *The Higher Education Academy.*

External Grant Funding

- **PI, UAE Technology Innovation Institute (TII) Research Program (2023).** Title: *Contributions to Edge and Multimodal Machine Learning* (USD$360,000).
- **Co-PI, US Air Force Office of Scientific Research (AFOSR), Asian Office of Aerospace Research and Development (2023).** Title: *Machine Learning in Heterogeneous Data from Multiple Sources* (USD$225,000).
- **PI, Deakin Science & Society Network (2023).** Title: *Cold-start Contract Cheating Identification from Side Information Using Latent Linear Writing Style Representation* (AUD$12,000).
- **PI, Community Bank at Deakin University (2022).** Title: *Deakin AI Challenge 2022* (AUD$3,000).
- **PI, Deakin University, School of Information Technology under the SIT Industry Engagement and Demonstrators Grant (2021).** Title: *Conversational Interface for Context-aware Systems 2021*, (AUD$7,500).
- **PI, Deakin University, School of Information Technology under the SIT Research Program Initialisation Grant (2021).** Title: *IoT-enabled Conversational System for Explainable Situational Awareness*, (AUD$15,000).
- **Co-PI, Defence Science and Technology: AI for Decision Making Initiative (2021).** Title: *Utilizing Extractive-Abstractive Summarization for Understanding the Narrative of Social Media Users from Multimodal Data* (AUD$20,000).
- **PI, Community Bank at Deakin University (2021).** Title: *Deakin AI Challenge 2021* (AUD$1,000).
- **Ontario Center of Excellence Postdoctoral Fellowship (2018-2019).** Title: *Machine Learning, Sentiment, and Social Media Analysis for Financial Analytics* (CAD$50,000).
- **Inria@SiliconValley Postdoctoral Fellowship, BIGDATANET associate team (UC Santa Barbara, ZENITH- Inria Sophia Antipolis). (2014-2015).** Title: *Analysis and Infrastructure of Distributed Recommender Systems* (EUR€47,000).

Awards and Honors

- **Deakin School of IT, Outstanding Leadership Award, 2023.** This award recognises recognises outstanding leadership in building and growing a productive and impactful research group called Machine Learning for Decision Support (MLDS) at the Geelong Waurn Ponds campus.
- **Deakin Vice-Chancellor's Award for Outstanding Contribution to Environmental Sustainability, 2022.** This award recognises excellent contribution to the AI Competition for Sustainable Development Goals and the advancement of the University's Strategic Plan, Deakin 2030: Ideas to Impact.
- **Deakin School of IT, Learner Engagement Award for The Deakin Simpsons AI Challenge, 2022.** This award recognises excellent contribution to the Deakin student community through the organization of an AI competition that focused student engagement on practical skills development with the goal of strengthening graduate employment outcomes.
- **Deakin School of IT, Industry Engagement Award, 2022.** This award recognises excellent contribution for excellence in industry collaboration and partnerships.
- **Best Demo Paper at the 23rd IEEE International Conference on Mobile Data Management (MDM), 2022.** Title: "Jarvis: A Voice-based Context-as-a-Service Mobile Tool for a Smart Home Environment".

Selected Publications

2026
64. D. Neupane, R. Dazeley, M.R. Bouadjenek, and S. Aryal, **"Learning Rewards, Not Labels: Adversarial Inverse Reinforcement Learning for Machinery Fault Detection"**, in the *Proceedings of the 25th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2026)*, 2025.
63. A. Pudasaini, M. Al-Hawawreh, M.R. Bouadjenek, H. Hacid, and S. Aryal, **"SAM: A privacy-preserving framework for selective attribute masking in voice recordings"**, *Expert Systems with Applications*, Vol. 238, 122205, 2026.

2025

62. K.T. Noor, W. Luo, A. Robles-Kelly, L.Y. Zhang, and M.R. Bouadjenek, **"Taxonomy-Guided Routing in Capsule Network for Hierarchical Image Classification"**, *Knowledge-Based Systems, Vol. 329, 114444, 2025.*

61. N. Harding, N. Bovopoulos, D. Caspi, C. Martin, S. McPhie, M.R. Bouadjenek, S. Aryal, and M. Hobbs, **"A Scoping Review of Large Language Model Chatbot Use for Alcohol and Other Drug Health Information"**, *Drug and Alcohol Review, 2025.*

60. Y. Zhou, M.R. Bouadjenek, and S. Aryal, **"MissDDIM: Deterministic and Efficient Conditional Diffusion for Tabular Data Imputation"**, In *the 34st ACM International Conference on Information and Knowledge Management (CIKM), 2025.*

59. L. Tamang, M.R. Bouadjenek, R. Dazeley, and S. Aryal, **"Handling Out-of-Distribution Data: A Survey"**, *IEEE Transactions on Knowledge and Data Engineering (TKDE), Vol. 37, 2025.*

58. Y. Zhou, M.R. Bouadjenek, and S. Aryal, **"HI-PMK: A Data-Dependent Kernel for Incomplete Heterogeneous Data Representation"**, In *the 28th European Conference on Artificial Intelligence (ECAI), 2025.*

57. D. Neupane, M.R. Bouadjenek, R. Dazeley, and S. Aryal, **"Data-driven machinery fault diagnosis: A comprehensive review"**, *Neurocomputing, Vol. 627, 129588, 2025.*

56. A. Pudasaini, M. Al-Hawawreh, M.R. Bouadjenek, H. Hacid, and S. Aryal, **"A comprehensive study of audio profiling: Methods, applications, challenges, and future directions"**, *Neurocomputing, Vol. 640, 130334, 2025.*

55. T. A. Kheya, M.R. Bouadjenek, and S. Aryal, **"Bias vs Bias - Dawn of Justice: A Fair Fight in Recommendation Systems"**, In *The European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML), 2025.*

54. L. Tamang, M.R. Bouadjenek, R. Dazeley, and S. Aryal, **"Improving out-of-distribution detection by enforcing confidence margin"**, *Knowledge Information System, Vol. 67, 2025.*

53. T. A. Kheya, M.R. Bouadjenek, and S. Aryal, **"Unmasking Gender Bias in Recommendation Systems and Enhancing Category-Aware Fairness"**, In *Proceedings of The Web Conference (WWW), 2025.*

52. A. Chen, M.R. Bouadjenek, U. Naseem, B. Suleiman, S. Jameel, F. Salim, H. Hacid and I. Razzak, **"Leveraging Taxonomy and LLMs for Improved Multimodal Hierarchical Classification"**, In *The 31st International Conference on Computational Linguistics (COLING), 6244-6254, 2025.*

2024

51. L. Tamang, M.R. Bouadjenek, R. Dazeley, and S. Aryal, **"Margin-bounded Confidence Scores for Out-of-Distribution Detection"**, In *IEEE International Conference on Data Mining (ICDM), 2024.*

50. K.T. Noor, A. Robles-Kelly, L.Y. Zhang, M.R. Bouadjenek, and W. Luo, **"A Consistency-Aware Deep Capsule Network for Hierarchical Multi-Label Image Classification"**, *Neurocomputing, Vol. 604, 128376, 2024.*

49. I. Razzak, M.R. Bouadjenek, M.A. Cheema, I.A. Hameed, G. Xu, and A. Beheshti, **"Guest Editorial: Special Issue on Generating Human Readable Explanations in NLP"**, *IEEE Transactions on Computational Social Systems, Vol. 11, 2023.*

48. Y. Zhou, M.R. Bouadjenek, and S. Aryal, **"Missing Data Imputation: Do Advanced ML/DL Techniques Outperform Traditional Approaches?"**, In *The European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML), 2024.*

47. S. Gupta, M.R. Bouadjenek, A. Robles-Kelly, T.K. Lee, T.T. Nguyen, A. Nazari and D. Thiruvady, **"Covid19-twitter: A Twitter-based Dataset for Discourse Analysis in Sentence-level Sentiment Classification"**, In *The 33rd ACM International Conference on Information and Knowledge Management (CIKM), 5370–5374, 2024.*

46. L.H. Boulogne, J. Lorenz, D. Kienzle, R. Schön, K. Ludwig, R. Lienhart, S. Jegou, G. Li, C. Chen, Q. Wang, D. Shi, M. Maniparambil, D. Müller, S. Mertes, N. Schröter, F. Hellmann, M. Elia, I. Dirks, M. Bossa, A. Díaz Berenguer, T. Mukherjee, J. Vandemeulebroucke, H. Sahli, N. Deligiannis, P. Gonidakis, N. Huynh, I. Razzak, M.R. Bouadjenek, M. Verdicchio, P. Borrelli, M. Aiello, J. Meakin, A. Lemm, C. Russ, R. Ionasec, N. Paragios, B. van Ginneken, and M. Revel Dubois, **"The STOIC2021 COVID-19 AI challenge: applying reusable training methodologies to private data"**, In *The Medical Image Analysis Journal, Vol. 97, 2024.*

45. T. Boone-Sifuentes, A. Nazari, M.R. Bouadjenek, and I. Razzak, **"MLT-Trans: Multi-level Token Transformer for Hierarchical Image Classification"**, In *The 28th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD), 385-396, 2024.*

44. S. Gupta, A. Robles-Kelly, M.R. Bouadjenek, A. Nazar, and D. Thiruvady, **"MARKS-mech: A Mask-based Prior Knowledge Dissemination Mechanism for including Discourse Relations for Sentiment Classification"**, In *The International Joint Conference on Neural Networks (IJCNN), 1-8, 2024.*

43. D. Neupane, A. Bhattarai, S. Aryal, M.R. Bouadjenek, U.M. Seok and J. Seok, **"SHINE: A deep

learning-based accessible parking management system”, *Expert Systems with Applications*, Vol. 238, 122205, 2024.

42. A. Rana, S. Sanner, M. R. Bouadjenek, R. Dicarlantonio, G. Farmaner, **“User Experience and The Role of Personalization in Critiquing-Based Conversational Recommendation”**, *ACM Transaction on The Web*, Vol. 18, 4, Article 43, 2024.

41. I. Razzak, M.R. Bouadjenek, S. Abu Raghib and W. Ding, **“Support Matrix Machine via Joint $\ell_{2,1}$ and Nuclear Norm Minimization Under Matrix completion Framework for Classification of Corrupted Data”**, *IEEE Transactions on Neural Networks and Learning Systems*, Vol. 35, 2024.

2023

40. S. Gupta, M.R. Bouadjenek, and A. Robles-Kelly, **“PERCY: A Post-hoc Explanation-based Score for Logic Rule Dissemination Consistency Assessment in Sentiment Classification”**, *Knowledge-Based Systems*, Vol. 275, 110685, 2023.

39. M. R. Bouadjenek, S. Sanner, and G. Wu, **“A User-Centric Analysis of Social Media for Stock Market Prediction”**, *ACM Transaction on The Web*, Vol. 17, 2, Article 9, 2023.

38. Z. Rasool, S. Aryal, M. R. Bouadjenek, and R. Dazeley, **“Overcoming Weaknesses of Density Peak Clustering Using a Data-dependent Similarity Measure”**, *Pattern Recognition Journal*, Vol. 137, 109287, 2023.

37. S. Gupta, M.R. Bouadjenek, and A. Robles-Kelly, **“A Mask-based Logic Rules Dissemination Method for Sentiment Classifiers”**, In *The 45th European Conference on Information Retrieval (ECIR),* 394-408, 2023.

36. T. Shen, J. Li, M.R. Bouadjenek, Z. Mai, and S. Sanner, **“Towards understanding and mitigating unintended biases in language model-driven conversational recommendation”**, *Information Processing & Management*, Vol. 60, 103139, 2023.

35. K.T. Noor, A. Robles-Kelly, L.Y. Zhang, and M.R. Bouadjenek, **“A Bottom-Up Capsule Network for Hierarchical Image Classification”**, In *the 2023 International Conference on Digital Image Computing: Techniques and Applications (DICTA)*, 2023.

2022

34. T. Boone-Sifuentes, A. Nazari, I. Razzak, M.R. Bouadjenek, A. Robles-Kelly, D. Ierodiaconou, and E. Oh, **“Marine-tree: large-scale marine organisms dataset for hierarchical image classification”**, in *The 31st ACM International Conference on Information and Knowledge Management (CIKM)*, 3838-3842, 2022.

33. Z. Gao, T. Shen, Z. Mai, M.R. Bouadjenek, I. Waller, A. Anderson, R. Bodkin, and S. Sanner, **“Mitigating the Filter Bubble while Maintaining Relevance: Targeted Diversification with VAE-based Recommender Systems”**, In *The 45th International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR)*, 2524-2531, 2022.

32. S. Gupta, M.R. Bouadjenek, and A. Robles-Kelly, **“An Analysis of Logic Rule Dissemination in Sentiment Classifiers”**, In *The Conference and Labs of the Evaluation Forum (CLEF)*, 1-8, 2022.

31. M.R. Bouadjenek, S. Sanner, Z. Iman, L. Xie, and X. Shi. **“A Longitudinal Study of Topic Classification on Twitter”**, *PeerJ Computer Science*, 2022.

30. N.D. Huynh, M.R. Bouadjenek, A. Hassani, I. Razzak, K. Lee, C. Arora, and A. Zaslavskya, **“Jarvis: A Voice-based Context-as-a-Service Mobile Tool for a Smart Home Environment”**, In *The 23rd IEEE International Conference on Mobile Data Management (MDM)*, 318-312, 2022. [**Best Demo Paper Award**]

29. I. Razzak, S. Naz, A. Ashraf, F. Khalifa, M.R. Bouadjenek, and S. Mumtaz, **“Mutliresolutional ensemble PartialNet for Alzheimer detection using MR imaging data”**, In *International Journal of Intelligent Systems*, 1-18, 2022.

28. K. Lefevre, C. Arora, K. Lee, A. Zaslavsky, M.R. Bouadjenek, A. Hassani, and I. Razzak, **“ModelOps for Enhanced Decision-Making and Governance in Emergency Control Rooms”**, *Environment Systems and Decisions*, 2022.

2021

27. S. Lyu, A. Rana, S. Sanner, and M.R. Bouadjenek, **“A Workflow Analysis of Context-driven Conversational Recommendation”**, In *Proceedings of The Web Conference (WWW)*, 866–877, 2021.

26. A. Qayyum, M. Mazhar, I. Razzak, and M.R. Bouadjenek, **“Multilevel depth-wise context attention network with atrous mechanism for segmentation of COVID19 affected regions”**, *Neural Computing and Applications*, 2021.

2020

25. M. R. Bouadjenek, S. Sanner, and Y. Du, **“Relevance- and Interface-driven Clustering for Visual Information Retrieval”**, In *Information Systems*, Vol. 94, 101592, 2020.

24. S. Gupta, A. Robels-Kelly, and M.R. Bouadjenek, **"Feature Extraction Functions for Neural Logic Rule Learning"**, In *Structural, Syntactic, and Statistical Pattern Recognition (S+SSPR)*, 98–107, 2020.

23. B. Zhang, S. Sanner, M. R. Bouadjenek, and S. Gupta, **"Bayesian Networks for Data Integration in the Absence of Foreign Keys"**, In *IEEE Transactions on Knowledge and Data Engineering (TKDE)*, Vol. 32, 803–808, 2020.

22. S. Gupta, D. Ko, M.R Bouadjenek, and S. Sanner, A. Chong, P. Austin, and M. Koh, **"Evaluation of Machine Learning Algorithms for Predicting Readmission after Acute Myocardial Infarction Using Routinely Collected Clinical Data"**, In *Canadian Journal of Cardiology*, Vol. 36, 878–885, 2020.

2019

21. M. R. Bouadjenek, J. Zobel, and K. Verspoor, **"Automated Assessment of Biological Database Assertions Using the Scientific Literature"**, In *BMC Bioinformatics*, Vol. 20, 216, 2019.

20. Y. Wang, G. Wu, M.R. Bouadjenek, and S. Sanner, **"A Novel Regularizer for Temporally Stable Learning with an Application to Twitter Topic Classification"**, In *The SIAM International Conference on Data Mining (SDM)*, 217–225, 2019.

19. M. R. Bouadjenek, H. Hacid, and M. Bouzeghoub, **"Personalized Social Query Expansion Using Social Annotations"**, In *Transactions on Large-Scale Data- and Knowledge-Centered Systems*, Vol. 11360, 1–25, 2019.

18. G. Wu, M. R. Bouadjenek, and S. Sanner, **"One-Class Collaborative Filtering with the Queryable Variational Autoencode"**, In *The 42nd International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR)*, 921—924, 2019.

17. M. R. Bouadjenek, and S. Sanner, **"Relevance-driven Clustering for Visual Information Retrieval on Twitter"**, In *The 4th ACM Conference on Human Information Interaction & Retrieval (CHIIR)*, 349–353, 2019.

Pre-2018

16. M.R. Bouadjenek, E. Pacitti, F. Masseglia, and A. El Abbadi, **"A Distributed Collaborative Filtering Algorithm Using Multiple Data Sources"**, In *10th International Conference on Advances in Databases, Knowledge, and Data Applications (DBKDA)*, 2018.

15. M. R. Bouadjenek and K. Verspoor, **"Multi-Field Query Expansion is Effective for Biomedical Dataset Retrieval"**, In *Database: The Journal of Biological Databases and Curation (Oxford)*, Vol. 2017, bax062, 2017.

14. M. R. Bouadjenek, K. Verspoor, and J. Zobel, **"Learning Biological Sequence Types Using the Literature"**, In *The Proceedings of the 26th ACM Conference on Information and Knowledge Management (CIKM)*, 1991–1994, 2017.

13. M. R. Bouadjenek, K. Verspoor, and J. Zobel, **"Automated Detection of Records in Biological Sequence Databases that are Inconsistent with the Literature."**, In *Journal of Biomedical Informatics*, Volume 71, 229–240, 2017.

12. M. R. Bouadjenek, K. Verspoor, and J. Zobel, **"Literature Consistency of Bioinformatics Sequence Databases is Effective for Assessing Record Quality"**, In *Database: The Journal of Biological Databases and Curation (Oxford)*, Vol. 2017, bax021, 2017.

11. Z. Iman, S. Sanner, M. R. Bouadjenek, and L. Xie, **"A Longitudinal Study of Topic Classification on Twitter"**, In *The 11th International AAAI Conference on Web and Social Media (ICWSM)*, 552–555, 2017.

10. M. R. Bouadjenek, H. Hacid, M. Bouzeghoub, and A. Vakali, **"PerSaDoR: Personalized Social Document Representation for Improving Web Search"**, In *Information Sciences*, Vol. 369, 614–633, 2016.

9. M. R. Bouadjenek, H. Hacid, and M. Bouzeghoub, **"Social Networks and Information Retrieval, How Are They Converging? A Survey, a Taxonomy and an Analysis of Social Information Retrieval Approaches and Platforms"**, In *Information Systems*, Vol. 56, 1–18, 2016.

8. M. Golestan Far, S. Sanner, M. R. Bouadjenek, and G. Ferraro, **"On Term Selection Techniques for Patent Prior Art Search"**, In *The 38th international ACM SIGIR conference on Research and development in information retrieval (SIGIR)*, 803-806, 2015.

7. M. R. Bouadjenek, S. Sanner, and G. Ferraro, **"A Study of Query Reformulation for Patent Prior Art Search with Partial Patent Applications"**, In *The 15th International Conference on Artificial Intelligence and Law (ICAIL)*, 23–32, 2015.

6. M. R. Bouadjenek, H. Hacid, and M. Bouzeghoub, **"LAICOS: An Open Source Platform for Personalized Social Web Search"**, In *The 19th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD)*, 1446-1449, 2013.

5. M. R. Bouadjenek, H. Hacid, M. Bouzeghoub, and A. Vakali, **"Using social annotations to enhance document representation for personalized search"**, In *The 36th international ACM SIGIR confer-*

ence on Research and development in information retrieval (SIGIR), 1049-1052, 2013.

4. M. R. Bouadjenek, H. Hacid, and M. Bouzeghoub, **"SoPRa: a new social personalized ranking function for improving web search"**, In *The The 36th international ACM SIGIR conference on Research and development in information retrieval (SIGIR)*, 861-864, 2013.

3. M. R. Bouadjenek, A. Bennamane, H. Hacid, and M. Bouzeghoub, **"Evaluation of personalized social ranking functions of information retrieval"**, In *The 13th International Conference on Web Engineering (ICWE)*, 283-290, 2013.

2. M. R. Bouadjenek, H. Hacid, M. Bouzeghoub, and J. Daigremont, **"Personalized social query expansion using social bookmarking systems"**, In *The 34th international ACM SIGIR conference on Research and development in Information Retrieval (SIGIR)*, 1113-1114, 2011.

1. Y. Lassoued, M.R. Bouadjenek, O. Boucelma, F. Lemos, amd M. Bouzeghoub, **"GQBox: geospatial data quality assessment"**, In *The 18th SIGSPATIAL International Conference on Advances in Geographic Information Systems (GIS)*, 534-535, 2010.

Supervision

Postdoctoral Researchers
- Zafaryab Rasool, *Unsupervised Machine Learning for Clustering Heterogenous Data* (post-doc at Deakin University; June 2021-June 2022)

PhD Students
- Mohammed Belgoumri, *Data Quality in Machine Learning* (Deakin University, graduates 2027+)
- Aymen Khouas, *Optimization in Edge Machine Learning* (Deakin University, graduates 2027+)
- Lakpa Tamang, *Understanding Linguistic Feature Encoding in Transformers for Multilingual Question Answering Systems* (Deakin University, graduates 2026+)
- Ngoc Dung Huynh, *Visual Question Answering for Improving Education* (Deakin University, graduates 2025+)
- Echo Zhou, *Investigating New Deep Learning Models for Visual Question Answering* (Deakin University, graduates 2025+)
- Dhiraj Neupane, *Machine Learning for Clustering Heterogenous Data* (Deakin University, graduates 2025+)
- Khondaker Tasrif Noor, *Multi-level Hierarchical Classification* (Deakin University, graduates 2024+)
- Tanya Boone-Sifuentes, *Invetigating Multi-level Hierarchical Classification Algorithms* (Deakin University, graduated 2024)

Masters Students
- Anil Pudasaini, *Privacy Preserving in Audio Profiling* (Deakin University, graduates 2025)
- Ngoc Dung Huynh, *Speech-to-CDQL: Context Definition and Query Language from Natural Language for Smart Home Environment* (Deakin University, graduated 2022)
- Yihao Du, *Relevance-driven Clustering Methods for Visual Interactive Search* (Deakin University, graduated 2019)

Event Organization
- WWW 2026 Workshop Co-Chairs; Dubai, UAE.
- ICDM 2024 Demo Co-Chairs; Dubai, UAE.
- ICSOC 2021 Workshop Co-Chairs; Dubai, UAE.
- ICSOC 2020 Tutorial/Panel Co-Chairs; Dubai, UAE.
- Deakin Simpsons Challenge 2021, 2022, and 2023.

Professional Activities

Journal Reviewing
- ACM Transactions on the Web .
- Knowledge and Information Systems.
- Information Retrieval Journal.
- Information Processing & Management.
- Neurocomputing Journal.
- Artificial Intelligence Journal.

Conference Program Committees
- The 47th International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR) (2025).
- The 34th International Joint Conference on Artificial Intelligence (IJCAI) (2025).
- The Web Conference (formerly known as the International World Wide Web Conference, abbreviated as WWW) (2025).
- The ACM International Conference on Web Search and Data Mining (WSDM) (2025).
- ACM Multimedia (2024, 2025).
- ACM International Conference on Information and Knowledge Management (CIKM) (2024, 2025).
- International Joint Conference on Artificial Intelligence (IJCAI) (2024).
- European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML) (2024).
- International Conference on Web Information Systems Engineering (WISE) (2018, 2021, 2022, 2023, 2024).
- ACS/IEEE International Conference on Computer Systems and Applications (AICCSA) (2022, 2023, 2024, 2025).
- Association for the Advancement of Artificial Intelligence (AAAI) (2019, 2022).
- IEEE International Workshop on Machine Learning for Signal Processing (2021).

Teaching Activities

Courses Taught

• **SIT330-770 - Natural Language Processing**, Deakin University.	**Fall 2024-2025**
• **SIT799 - Human Alligned AI**, Deakin University.	**Winter 2020-2025**
• **SIT112 - Data Science Concepts**, Deakin University.	**Fall 2023**
• **SIT328 - Communicating IT Innovations**, Deakin University.	**Fall 2023**
• **SIT102 - Introduction to Programming**, Deakin University.	**Fall and Winter 2022**
• **SIT744 - Deep Learning**, Deakin University.	**Fall 2020-2021**
• **SIT740 - Research and Developement in IT**, Deakin University.	**Fall 2020-2021**
• **MIE1513 - Decision Support Systems**, University of Toronto.	**Winter 2019**
• **Formal specifications and introduction to UML**, UVSQ.	**Winter 2011-2012**
• **Conception of Databases**, UVSQ.	**Winter 2009-2010**

Course developement
- **SIT330-770: Natural Language Processing**, Deakin University 2024.
- **SIT799: Human Alligned AI**, Deakin University 2020.

References
- **Prof. Scott Sanner**, University of Toronto, Canada: ssanner@mie.utoronto.ca
- **Prof. Karin Verspoor**, RMIT University, Australia: karin.verspoor@rmit.edu.au
- **Prof. Hakim Hacid**, Technology Innovation Institute (TII), UAE: hakim.hacid@tii.ae
- **Prof. Mokrane Bouzeghoub**, University of Paris-Saclay, Versailles/CNRS, France: mokrane.bouzeghoub@uvsq