

Dr Rajith Vidanaarachchi

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EDUCATION

- 2017 – 2021 **PhD in Engineering and Computer Science**
The Australian National University
Pattern Recognition for Complex Heterogeneous Time-Series Data: An Analysis of Microbial Community Dynamics
Primary Supervisor: Professor Saman Halgamuge
- 2011 – 2016 **BSc Engineering (Honours) in Computer Science and Engineering**
University of Moratuwa, Sri Lanka
GPA 4.0 | 1st class | Dean's List in All Semesters

EXPERIENCE

- 2021 – Present **Senior Technical Officer**
The University of New England (Seconded at The University of Melbourne)
I work at the University of Melbourne's Transport, Health and Urban Design (THUD) Research Lab as a Research Fellow. My research primarily include agent based modelling of social dynamics. I contribute to the Victorian response to covid-19 pandemic through modelling. Other contributions and interests include the effect of electric vehicles and autonomous vehicles on social-economic dynamics.
- 2021 – present **Casual Sessional Academic | Head Tutor**
The University of Melbourne
 - MCEN90048 Artificial Intelligence for Mechatronics (2021 Sem 1, 2022 Sem 1): I was responsible for coordinating other tutors, delivery of tutorials and labs, planning and marking assignments, setting up quizzes, online learner engagement (COVID-19 measures), setting exam questions and marking.
 - ENGR30004 Numerical Algorithms in Engineering (2021 Sem 2): Ongoing position. Apart from the same responsibilities as above, I also managed the teaching budget of 50,000+ AUD.
- 2019 – 2021 **Visiting PhD Student**
The University of Melbourne (Optimisation and Pattern Recognition Lab)
I moved to Melbourne to work with my primary PhD advisor. I continued my PhD research, presented my work regularly and assisted in the writing of grant applications (ARP Discovery, Linkage, NHMRC etc.)
- 2018 – 2019 **Casual Professional | Programmer**
The Australian National University
I was a data analyst/programmer for the ANU College of Arts and Social Sciences.
- 2017 – 2018 **Casual Sessional Academic | Tutor**
The Australian National University
 - COMP1600 Foundations of Computing
 - ENGN8535 Engineering Data Analytics
- 2016 **Software Engineer**
PreviewVR (Pvt) Ltd
- 2016 – 2017 **Google Summer of Code Scholar**
SciRuby Foundation
- 2015 – 2016 **Visiting Instructor | Tutor**
University of Moratuwa, Sri Lanka
 - CS3032 Computer Networks
 - CS2952 Communication Skills

2014 – 2017 **Trainer**
Sri Lankan National Informatics Olympiad Team

2014 – 2015 **Software Engineering Intern**
Kartosoft GmbH, Lüneburg, Germany

PUBLICATIONS

Please refer to my Google Scholar profile.

TALKS & PRESENTATIONS

- [1] *Imagery, Privacy and Ethics: An Overview of Partially Occluded Facial Biometric Analysis in the Era of Face Masks* ICECET 2021, Virtual
- [2] *From The International Space Station To Tropical Rainforests And Polar Ice Caps: Microbial Communities Foretell The Effects Of Climate Change* ICIAfS 2021, Virtual
- [3] *DynMIN: Temporally Dynamic Microbial Interaction Network Inference*. RECOMB 2020, Virtual
- [4] *Exploring the Dynamics of Microbial Interactions*. Lorne Genome 2020. Lorne, Australia
- [5] *Data-driven Insights for Complex Biological Systems*. 2019. IESL, Colombo, Sri Lanka
- [6] *Exploring Computational Inference of Microbial Interactions and their Dynamics*. ICIIS '19, Peradeniya, Sri Lanka
- [7] *IMPARO: inferring microbial interactions through parameter optimisation*. InCoB '19, Jakarta, Indonesia

ACADEMIC EXPERIENCE

Teaching Experience

The University of Melbourne

- ENGR30004 Numerical Algorithms in Engineering (2021 S2)
- MCEN90048 Artificial Intelligence for Mechatronics (2021 S1)

The Australian National University

- ENGN8535 Engineering Data Analytics (2018 S1)
- COMP1600 Foundations of Computing (2017 S2)

The University of Moratuwa

- CS3032 Computer Networks (2015-2016)
- CS2952 Communication Skills (2015-2016)

Supervision

- Afira Faleel (Honours), The Royal College of Surgeons Ireland

Training & Qualifications

- Associate Fellow of the Higher Education Academy (2020)
- ANU Ally Training (2020)
- Principles of Tutoring and Demonstrating (2017)

Reviewing

- BMC Bioinformatics
- Proceedings of the National Academy of Sciences (PNAS) (Assisted)
- Moratuwa Engineering Research Conference (MERCon)

AWARDS

Grants

- The University of Melbourne, Learning and Teaching Initiatives Grant (2022)
- Google AI Tensorflow Faculty Award - "Fairness in AI" (2021)

Scholarships

- ANU International PhD Scholarship (2017)
- Higher Degree Research Merit Scholarship (2017)
- Mahapola Higher Education (Merit) Scholarship (2011)

Competitions & Other

- Dean's List of Faculty of Engineering, University of Moratuwa (All Academic Semesters 2011 - 2016)
- Winner at Spirulation Hackathon, World Conference of Youth (2014)
- IEEEExtreme within top 100 teams (2011 - 2014)

Sri Lankan National Science Olympiads (2007-2011)

- Informatics: 2 Bronze, 2 Silver
- Mathamatics: 1 Bronze, 1 Silver
- Physics: 1 Gold

REFEREES

Available Upon Request