

Curriculum Vitae

Piyadi Gamage Jayani Lakshika
Department of Econometrics and Business Statistics
Monash University, Australia

Email: jayani.piyadigamage@monash.edu, jayanilakshika76@gmail.com
Website: <https://jayanilakshika.netlify.app/>
GitHub: <https://github.com/JayaniLakshika>
LinkedIn: <https://www.linkedin.com/in/jayani-lakshika-9a0297162>

Education

PhD candidate - Statistics

Faculty of Business & Economics, Monash University, Australia
Thesis title: Interactive and Dynamic Graphics for Studying Non-linear Dimension Reduction Models of High-dimensional Data
July 2022 —

B.Sc. (Honours) in Statistics

University of Sri Jayawardenepura (USJ), Sri Lanka
Thesis title: Computer Vision System For Automated Medicinal Plant Identification
January 2017
— December 2020

Diploma in Computer System Design (DCSD)

National Institute of Business Management (NIBM), Sri Lanka
March 2016 —
March 2017

Certificate in Business Accounting

Chartered Institute of Management Accountants (CIMA), Sri Lanka
December 2015
— September 2016

Appointments Held

Teaching Associate

Department of Econometrics and Business Statistics, Monash University, Australia
January 2023 —

Teaching Assistant (Temporary Instructor)

University of Sri Jayawardenepura (USJ), Sri Lanka
July 2021 —
July 2022

Associate Data Analyst

Vizuamatix (Pvt) Ltd, Sri Lanka
January —
November 2021

Trainee Data Analyst

Vizuamatix (Pvt) Ltd, Sri Lanka
July —
December 2020

Research Internship

Vizuamatix (Pvt) Ltd, Sri Lanka
Industrial training as a fulfillment of the degree B.Sc. (Honours) in Statistics
January —
June 2020

Publications

Papers

Lakshika, J. P., & Talagala, T. S. (2021). Computer-aided Interpretable Features for Leaf Image Classification. arXiv preprint [arXiv:2106.08077](https://arxiv.org/abs/2106.08077)

Conference proceedings

Young Scientists' Conference on Multidisciplinary Research (YCMR) abstract publication (ISSN 2815-0260) October 2021

17th applied science research poster and abstract publication (Page 74) September 2021

Conference presentations and contributed talks

Visualise your fitted non-linear reduction model in high-dimensional space 2024
UseR! 2024, Salzburg, Austria

Visualising how non-linear dimension reduction warps your data 2024
Faculty of BusEco Three Minute Thesis (3MT) competition, Monash University, Australia

Visualise your fitted non-linear dimension reduction model in the high-dimensional data space 2024
Victorian branch of the Australian and New Zealand Industrial and Applied Mathematics Society (VicANZIAM) 2024 (RMIT university, Melbourne, Australia)

Visualize your fitted non-linear dimension reduction model in the high-dimensional data space — Invited speaker 2024
Bioinformatics Seminar, Monash University, Australia

With non-linear dimension reduction, when can you believe what you see? 2023
Australian Statistical Conference (ASC 2023) (Wollongon, Australia)

Viewing the model from a non-linear dimension reduction in the high-dimensional data space — Invited speaker 2023
12th-Conference of the Asian Regional Section of the International Association for Statistical Computing (IASC-ARS 2023) (Wollongon, Australia)

Higher studies webinar — Invited speaker 2023
University of Sri Jayewardenepura (USJ), Sri Lanka

Computer Vision System for Automated Medicinal Plant Identification — Invited speaker 2022
NUMBATs meeting, Monash University, Australia

Computer Vision System for Automated Medicinal Plant Identification — [Invited speaker](#) 2021
Estadística 2021, the Annual Statistics Day organized by the Statistics Society of University of Sri Jayewardenepura, Sri Lanka

Computer Vision System for Automated Medicinal Plant Identification — [Invited speaker](#) 2021
Vx Tech Talk 2021, Vizumatix Pvt. Ltd, Sri lanka

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| Statistical machine learning for medicinal plant leaves classification — Presentation | 2021 |
| 17th Applied Statistics Conference, Slovenia | |
| Statistical machine learning for medicinal plant leaves classification — Speed-talk | 2021 |
| Young Scientists' Conference on Multidisciplinary Research (YSCMR 2021) which is organised by the Young Scientists' Association of the National Institute of Fundamental Studies, Sri Lanka (NIFS-YSA) | |

Visiting

A/Prof. Ursula Laa

At the University of Natural Resources and Life Sciences, Vienna (BOKU University), accompanied by Prof. Di Cook, Prof. Eun-Kyung Lee, and A/Prof. Natalia da Silva (one week)

July 2024

R packages

airpurifyr: Provide an interface to scrape air quality data from <https://openaq.org/>

cardinalR: Collection of data structures.

quollr: Tool to visualise how non-linear dimension reduction warps your data

olympics: Provide an interface to scrape Olympic data from <https://olympics.com/>

MedLEA: Software which contains information about medicinal plants in Sri Lanka

DSjobtracker: Software which contains what skills and qualifications are required for data science related jobs

Teaching

Tutor

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|---|-------------|
| [ETC5510] Introduction to data analysis | 2024 |
| [ETC1010] Introduction to data analysis | 2024 |
| [ETC3250] Introduction to machine learning | 2023 — 2024 |
| [ETC5250] Introduction to machine learning | 2023 — 2024 |
| [ETC5521] Exploratory data analysis | 2023 |
| [STA 326 2.0] R Programming | 2022 |
| [STA 213 2.0] Inferential Statistics | 2022 |
| [STA 214 1.0] Nonparametric Statistics | 2022 |
| [STA 215 2.0] Sampling techniques | 2022 |
| [STA 115 1.0] Elements of Sampling | 2022 |
| [STA 113 2.0] Descriptive Statistics | 2022 |

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| [STA 114 2.0] Probability and Distribution Theory I | 2022 |
| [STA 224 2.0] Regression Analysis | 2021 |
| [STA 225 2.0] Design of Experiments | 2021 |
| [STA 226 1.0] Data Analysis II | 2021 |
| [STA 123 2.0] Probability and Distribution Theory II | 2021 |
| [STA 124 2.0] Data Analysis I | 2021 |
| [STA 125 1.0] Statistical Communication | 2021 |

Awards

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| Monash Business School Prestigious International Conference Award Monash University, Australia | 2024 |
| Co-Funded Graduate Research Scholarship, Monash Business School Monash University, Australia | 2022 — 2026 |
| Diploma in Computer System Design (DCSD) — Gold medalist National Institute of Business Management (NIBM), Sri Lanka | 2017 |
| OCTAVE competition — Finalists Research abstract competition organized by OCTAVE company, Sri Lanka | 2021 |
| Stat Circle quiz competition — Winners Team member of the winners at inter university quiz competition organized by the Stat Circle Faculty of Science, University of Colombo, Sri Lanka | 2018 |

Academic Service & Community Engagment

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| UseR! 2024 Session Chair Conference in Salzburg, Austria | 2024 |
| ASC Session Chair Australian Statistical Conference in Wollongong, Australia | 2023 |
| WOMBAT tutorials — Helper Monash University, Australia | 2022 |
| Statistical Consultancy Service — Department representative University of Sri Jayewardenepura (USJ), Sri Lanka | 2020 |

Professional Memberships

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| Statistical Society of Australias (SSA) | 2022– |
| R-Ladies Melbourne | 2022– |
| Statistics society University of Sri Jayewardenepura (USJ), Sri Lanka | 2017–2022 |