

Rajitha M. Silva, Ph.D.
<http://www.linkedin.com/in/rajithamsilva>

RESEARCH INTERESTS Computational Bayesian Statistics, Sports analytics

EDUCATION **Simon Fraser University**, British Columbia, Canada

Ph.D., Statistics, 2017

- Dissertation Title: *Sports Analytics*.
- Advisor: Tim B. Swartz, Ph.D.

Sam Houston State University, Texas, USA

M.Sc., Statistics, 2013

- Project: *The robustness of the synthetic t chart for non-normality*.
- Advisor: Stephen Scariano, Ph.D.

University of Peradeniya, Peradeniya, Sri Lanka

M.Sc., Industrial Mathematics, 2017

- Project: *Improved method for selecting powerplay specialists in One-Day Cricket team*.
- Advisor: Sarath Siyambalapitiya, Ph.D.

Rajarata University of Sri Lanka, Mihintale, Sri Lanka

B.Sc.(Hons) in Industrial Mathematics, 2008

First Class Honours

- Project 1: *An optimization technique to determine the most economical diet that satisfies the nutritional requirements*.
- Project 2: *An application to statistical process control in garment industry*.
- Advisor: W.B. Daundasekera, Ph.D.

ACADEMIC EXPERIENCE **Senior Lecturer** May 2017 to present
Department of Statistics,
Faculty of Applied Sciences
University of Sri Jayewardenepura

PROFESSIONAL POSITIONS **Head - Department of Statistics**

since September, 2025

University of Sri Jayewardenepura, Gangodawila, Nugegoda, Sri Lanka.

As Head of the Department, I provide academic and administrative leadership to advance teaching, research, and professional engagement in statistics. My responsibilities include strategic planning, curriculum development, staff management, and fostering a collaborative research environment.

President - IASSL

since April, 2025

Institute of Applied Statistics, Sri Lanka (IASSL)
The Professional Center, 275/75,
Prof. Stanley Wijesundera Mawatha, Colombo 07, Sri Lanka.

As President, I lead the strategic direction of IASSL, fostering the advancement of applied statistics in Sri Lanka through research, education, and professional development initiatives. My role involves overseeing key programs, strengthening collaborations, and promoting statistical literacy nationwide.

Secretary - IASSL

April, 2023 - March, 2025

Institute of Applied Statistics, Sri Lanka (IASSL)
The Professional Center, 275/75,
Prof. Stanley Wijesundera Mawatha, Colombo 07, Sri Lanka.

As Secretary, I managed the administrative functions of IASSL, coordinated meetings, maintained records, and facilitated communication among members, contributing to the organization's operational efficiency and growth.

Member - Program Committee

December 2024

International Statistics Conference
Institute of Applied Statistics, Sri Lanka

Contributed to the planning and organization of the conference program, including the review and selection of submissions, ensuring a high-quality and diverse range of topics for attendees.

Program Coordinator - National Statistics Olympiad 2022 - 2023

Institute of Applied Statistics, Sri Lanka (IASSL)
The Professional Center, 275/75,
Prof. Stanley Wijesundera Mawatha, Colombo 07, Sri Lanka.

Oversaw the organization of the National Statistics Olympiad, aiming to promote statistical thinking among students and identify talent for international competitions.

Secretary - Committee for Popularization of Science (CPS) 2023

The Sri Lanka Association for the Advancement of Science (SLAAS)
120/10, Vidya Mawatha,
Colombo 07, Sri Lanka

As Secretary of CPS, I facilitated initiatives to enhance public engagement with science, organizing events and programs to make scientific knowledge accessible and appealing to diverse audiences.

Coordinator - Statistics in Sports Research Group since 2021

Department of Statistics,
Faculty of Applied Sciences
University of Sri Jayewardenepura

Lead the first research group in Sri Lanka dedicated to sports analytics, guiding research projects that apply statistical methods to sports performance and strategy analysis.

JOURNAL PUBLICATIONS

1. Jayasinghe DY, **Silva, R.M.**, Jayasinghe CL, Classification of batters format-wise based on ball-wise striking performance, In the proceedings of ICARC International Conference on Advanced Research in Computing 2023; (IEEE Xplore).
2. **Silva, R. M.**, Jayasinghe CL, Jayasinghe DY, De Silva, LHKP, On Ballwise Survival of a Modern Test Batter, In the proceedings of ISSAT International Conference on Data Science in Business, Finance and Industry 2023; 123-130.
3. Ariyaratne, M. K. A., and **Silva, R. M.** Meta-heuristics meet sports: a systematic review from the viewpoint of nature inspired algorithms. International Journal of Computer Science in Sport 21.1 (2022): 49-92.
4. Pussella, P., **Silva, R. M.**, & Egodawatta, C. (2022). In-game winner prediction and winning strategy generation in cricket: A

machine learning approach. *International Journal of Sports Science & Coaching*, <https://doi.org/10.1177/17479541221119738>

5. Kottearachchi, S.S.S., Jayasinghe, C.L., **Silva, R.M.**, An Investigation of Survival Abilities of Opening Batsmen in One-Day International Cricket *Vol. 40 No. 1 (2022): Sports Analytics within Sports Economics and Management, ISSN:1133-3197*
6. De Silva, D. , Jayasinghe, C.L., **Silva, R.M.**, A Study of Batting out-of-form in One-Day International Cricket *Vol. 40 No. 1 (2022): Sports Analytics within Sports Economics and Management, ISSN:1133-3197*
7. Amadarshanie, D.B.T, Gunathilaka, T.L.,**Silva, R.M.**, Navaratne, S.B. Peiris, L.D.C. (2022) Functional and antiglycation properties of cow milk set yogurt enriched with *Nyctanthes arbor-tristis* L. flower extract *LWT 154, 112910*
8. Peiris, T. S. N. and **Silva, R.M.** (2020) Player Ranking in Taekwondo: A Bayesian Elo Rating System *Innovation to Impact (FITI) 1, 1-5*
9. **Silva, R.M.** and Peiris, T. S. N. (2020) Player Ranking in Taekwondo: A Bayesian Elo Rating System *Innovation to Impact (FITI) 1, 1-5*
10. **Silva, R.M.**, Guan, Y. and Swartz, T.B. (2019) Bayesian treatment of non-standard problems in test analysis *METRON, 1-12.*
11. **Silva, R.M.**, Guan, Y. and Swartz, T.B. (2017) Bayesian diagnostics for test design and analysis *Journal on Efficiency and Responsibility in Education and Science, 10(2), 44-50.*
12. **Silva, R.M.**, Davis J., Swartz T.B. (2017). The Evaluation of Pace of Play in Hockey. *Journal of Sports Analytics 3(2), 83-99.*
13. **Silva, R.M.**, Perera, H., Davis, J. and Swartz, T.B. (2016). Tactics for Twenty20 cricket. *South African Statistical Journal, 50(2), 261-271.*
14. **Silva, R.M.** and Swartz, T.B. (2016). Analysis of substitution times in soccer. *Journal of Quantitative Analysis in Sports, 12(3), 113-122.*
15. **Silva, R.M.** and Swartz, T.B. (2016). Rejoinder to Myers. *Journal of Quantitative Analysis in Sports, 12(3), 125-125.*
16. **Silva, R.M.**, Manage, A.B.W. and Swartz, T.B. (2015). A study of the powerplay in one-day cricket. *European Journal of Operational Research, 244, 931-938.*

UNDERGRADUATE
SUPERVISION

1. De Silva, K.K.D.S. **Silva, R.M.** (2017) An analysis of batting consistency in ODI Cricket using one-sided EWMA control chart. *Presented extended abstract at International Conference-Institute of Applied Statistics Sri Lanka (IC-IASSL),* Conference proceedings: <https://www.iappstat.lk/home/icas2017/images/proceedings.pdf>
2. Abeyrathna, W.P.A.A., **Silva, R.M.** , Gunasena, M.P.K. (2017) Forecasting the freight charge of mineral exports in Sri Lanka.
3. Tharaka, J.G.D., **Silva, R.M.** and Meegasdeniya, R.L. (2017) Application of statistical process control tools in liquid packing line of a pharmaceutical company in Sri Lanka.
4. Kumara, N.A.K.S.R., **Silva, R.M.** (2018) Bayesian Logistic Regression Approach for In-Game Prediction in Volleyball. *Presented extended abstract at Asia international Conference on Multidisciplinary Research 2019 (AIMR'19)*
5. Peiris, T.S.N., **Silva, R.M.** (2019) Player Ranking in Taekwondo: A Bayesian Elo Rating System *Presented extended abstract at SLAAS/SLIC FITI2020 conferenc*
6. Fernando, W.R.I., **Silva, R.M.** and Perera, W.N.N.K. (2019) A Study of Forehand Overhead Smash in Badminton: Relationship with Upper Body Anthropometrics *Presented extended abstract at International Research Conference 2020 - KDU*
7. Perera, P.M.V.S., **Silva, R.M.** and Perera, W.N.N.K. (2019) A Study on the Push Start in Swimming: Relationship with Lower Body Anthropometric Measurements *Presented extended abstract at GARI Winter Multidisciplinary Symposium 2020*

AWARDS

Travel Awards

- Joint Statistical Meetings, Seattle, USA Aug 2015
- IASSL International Conference, Colombo, SL Dec 2014
- Conference of Texas Statisticians, Dallas, USA Mar 2014

- Mathematical Association of America Apr 2013
Texas Section 93rd Annual Meeting
- Conference of Texas Statisticians, Houston, USA Mar 2013

Student Awards — Simon Fraser University (SFU)

- Graduate Fellowship(Ph.D.) Summer 2015
- Graduate Fellowship(Ph.D.) Summer 2014

Student Awards — Sam Houston State University (SHSU)

- Special Graduate Scholarship Spring 2013
- Special Graduate Scholarship Fall 2012
- Franklin D. Rich scholarship 2012-2013
 - This scholarship is awarded for the best performance in the first year graduate studies in the department of Mathematics and Statistics.

TALKS/POSTER
PRESENTATIONS

- Bayesian Young Statisticians Meeting, Florence, Italy June 2016
 - “Analysis of substitution times in soccer.”
- IASSL International Statistical Conference, Colombo, SL Dec 2014
 - “A study of the powerplay in one-day cricket.” (Invited talk)
- Conference of Texas Statisticians, Dallas, USA Mar 2014
 - “A study of the powerplay in one-day cricket.” (Poster)
- Peradeniya University Research Sessions, Peradeniya, SL 2010
 - “An optimization technique to determine the most economical diet that satisfies the nutritional requirements.”
- Annual Research Sessions (RUSL), Mihintale, SL 2007
 - “An application to statistical process control in garment industry.”

SELECTED
WORKSHOPS
ATTENDED

- Publishing social science research in high profile journals, University of Sri Jayewardenepura, Sri Lanka Jan. 08, 2018
 - Resource Person: Dulini Fernando, Ph.D.
- Time series analysis in data sciences, Post Graduate Institute of Science, University of Peradeniya, Sri Lanka Dec.20-22, 2017
 - Resource Persons: N. Ravishanker, Ph.D., and N. Balakrishna, Ph.D.
- Review writing and publication metrics, University of Sri Jayewardenepura, Sri Lanka July 26, 2017

- Resource Person: Prof. Samuel D. Vasikaran

PROFESSIONAL
AFFILIATIONS

- American Statistical Association (ASA),
ASA ID: 203246
- Institute of Applied Statistics Sri Lanka (IASL),
IASL ID: 429
- Sri Lanka Association for the Advancement of Science (SLAAS),
SLAAS ID: 11450/E1

REFERENCE

Prof. T. B. Swartz

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