

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

RESEARCH INTERESTS Bayesian computations, 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

CURRENT PROFESSIONAL POSITIONS **Country Coordinator - The International Statistical Literacy Project (ISLP)** since 2022
Department of Statistics,
Faculty of Applied Sciences
University of Sri Jayewardenepura

Coordinator - Statistics in Sports Research Group since 2021
Department of Statistics,
Faculty of Applied Sciences
University of Sri Jayewardenepura

Secretary - IASSL since April, 2023
Institute of Applied Statistics, Sri Lanka (IASSL)
The Professional Center, 275/75,
Prof. Stanley Wijesundera Mawatha, Colombo 07, Sri Lanka.

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 REFERENCE

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 Department of Statistics and Actuarial Science
 Simon Fraser University
 Canada