Leandro Soriano Marcolino

LSM's CoLab Laboratory
Data Science Group
School of Computing and Communications
http://wp.lancs.ac.uk/colab

InfoLab21
Lancaster University
Lancaster, Lancashire, UK
1.marcolino@lancaster.ac.uk

ORCID: 0000-0002-3337-8611

Research Interests: Coordination, collaboration, team formation, multi-agent systems, machine learning, computer games, robotics, artificial intelligence, on-line learning, on-line planning.

Education

- PhD, Computer Science, August 2011~August 2016 University of Southern California, LA, USA. Advisor: Dr. Milind Tambe Thesis title: "Three Fundamental Pillars of Decision-Centered Teamwork"
- Masters, Systems Information Science, September 2009~August 2011 Future University – Hakodate, Hokkaido, Japan. Advisor: Dr. Hitoshi Matsubara
- Bachelor, Computer Science, August 2004~December 2008
 Universidade Federal de Minas Gerais, Minas Gerais, Brazil. Advisor: Dr. Luiz Chaimowicz
 GPA 4.89/5.00 (1st place in the class). Literature and Philosophy were also studied.

Research Experience

Lecturer (Assistant Professor)
Lancaster University

August 2016~Present

Research Assistant

August 2011~May 2016

University of Southern California

• Conducted research in multi-agent teamwork, with topics including team formation, team evaluation, team voting, machine learning in teams. The research included both rigorous theoretical results and statistically-grounded empirical work, covering many domains.

Japanese Government Scholarship Student (Monbukagakusho) Future University – Hakodate April 2009~August 2011

• Improved the performance of the state of the art Computer Go program by using large scale computing and machine learning to evolve an agent team for the UCT Monte Carlo algorithm.

CNPQ Scientific Initiation Scholarship

March 2006~March 2009

- Universidade Federal de Minas Gerais
 - Proposed novel algorithms for swarm robotics coordination, alleviating congestion problems and improving navigation in complex environments with teamwork.
 - Developed a procedure for visualization of genome data.

Research Awards

- Best Program Committee Award From PRIMA 2018, November 2018.
- Best Dissertation

From the Computer Science Department, University of Southern California (USC), May 2016, with the dissertation "Three Fundamental Pillars of Decision-Centered Teamwork".

- Top innovations that improved the world Listed at Mashable.com, as one of the top 26 incredible innovations that improved the world, December 2015, with the work "Preventing HIV Spread in Homeless Populations using PSINET Emerging Application Case Study"
- Best research assistant
 From the Computer Science Department, University of Southern California (USC), April 2015.
- Best paper nominee
 4 out of 127 full papers and 575 submissions, at the Tenth International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2011), May 2011, with the work "Multi-Agent Monte Carlo Go"
- Best paper
 Brazilian national competition of undergraduate works in Computer Science (XXVIII Concurso de Trabalhos de Iniciação Científica), by the Brazilian Computer Science Society, April 2009, with the work "Coordination Algorithms for a Swarm of Robots" ("Algoritmos de Coordenação para Enxames de Robôs").
- Gold medal honor
 From the Computer Science Department, Universidade Federal de Minas Gerais, February 2009, for finishing the undergraduate course with the highest grades.
- Best works in Hard Sciences
 Selected for the best Hard Science work (8 selected, unranked), in the annual undergraduate research
 competition (XVII Semana de Iniciação Científica) at Universidade Federal de Minas Gerais, October
 2008, with the research "Genome Visualization in Space" ("Visualização de Genomas no Espaço").

Research Publications

Journal Papers

- 1. E. S. Yourdshahi, M. A. C. Alves, A. Varma, L. S. Marcolino, J. Ueyama, P. Angelov. "Online estimators for ad-hoc task execution: learning types and parameters of teammates for effective teamwork". In Autonomous Agents and Multi-Agent Systems, vol. 36, no. 45, August 2022.
- 2. Y. T. Passos, X. Duquesne, L. S. Marcolino, "On the Throughput of the Common Target Area for Robotic Swarm Strategies", Mathematics, vol. 10, no. 14, 2482, July 2022.
- 3. I. D. S. Gomes, C. A. Santana, L. S. Marcolino, L. H. F. D. Lima, R. C. D. Melo-Minardi, R. S. Dias, S. O. de Paula, S. D. A. Silveira. "Computational prediction of potential inhibitors for SARS-COV-2 main protease based on machine learning, docking, MM-PBSA calculations, and metadynamics". In PLoS ONE, 17(4), April 2022, [e0267471].
- 4. W. Ramos, M. Silva, E. Araújo, V. Moura, K. Oliveira, L. S. Marcolino, and E. R. Nascimento. "Text-driven video acceleration: A weakly-supervised reinforcement learning method". In the IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), March 2022.
- 5. M. Escarce Junior, G. R. Martins, L. S. Marcolino, E. Rubegni. "A Meta-interactive Compositional Approach that Fosters Musical Emergence through Ludic Expressivity". In ACM PACMHCI CHI PLAY, Vol. 5, No. CHI PLAY, 262, p. 1-32, July 2021.
- 6. P. Hardy, L. S. Marcolino, J. F. Fontanari. "The paradox of productivity during quarantine: an agent-based simulation". In European Physical Journal B, Vol. 94, 40, January 2021.
- 7. L. S. Marcolino, A. Lakshminarayanan, V. Nagarajan, M. Tambe. "Every Team Deserves a Second Chance: An extended study on predicting team performance". In Autonomous Agents and Multi-Agent Systems, Vol. 31, No. 5, September 2017, p. 1003-1054, DOI 10.1007/s10458-016-9348-2.

- 8. L. S. Marcolino, Y. T. dos Passos, Á. A. F. de Souza, A. S. Rodrigues, L. Chaimowicz. "Avoiding target congestion on the navigation of robotic swarms". In Autonomous Robots, Vol. 41, No. 6, August 2017, p. 1297-1320, DOI 10.1007/s10514-016-9577-x.
- 9. L. S. Marcolino, L. Chaimowicz. "Coordination Algorithms for a Swarm of Robots" ("Algorithms de Coordenação para Enxames de Robôs"). Electronic Journal of Scientific Initiation (Revista Eletrônica de Iniciação Científica), Year IX, Volume 3, September 2009. (In Portuguese) (Best paper, by the Brazilian Society of Computer Science)

Magazine Papers

A. Yadav, L. S. Marcolino, E. Rice, R. Petering, H. Winetrobe, H. Rhoades, M. Tambe, H. Carmichael. "PSINET: Aiding HIV Prevention Amongst Homeless Youth by Planning Ahead". In AI Magazine, 2016.

Full Conference Papers

- 11. R. Mu, W. Ruan, L. S. Marcolino, Q. Ni. "Sparse Adversarial Video Attacks with Spatial Transformations". In Proceedings of the 32nd British Machine Vision Conference (BMVC 2021), November 2021.
- 12. L. Pelcner, S. Li, M. A. C. Alves, **L. S. Marcolino**, A. Collins. "Real-time Learning and Planning in Environments with Swarms: A Hierarchical and a Parameter-based Simulation Approach". In Proceedings of the 19th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2020), May 2020.
- 13. W. De Souza Ramos, M. M. Silva, E. R. Araujo, L. S. Marcolino, E. R. Nascimento. "Straight to the Point: Fast-forwarding Videos via Reinforcement Learning Using Textual Data". In Proceedings of the 2020 IEEE Conference on Computer Vision and Pattern Recognition (CVPR 2020), June 2020.
- E. S. Yourdshahi, T. Pinder, G. Dhawan, L. S. Marcolino and P. Angelov. "Towards Large Scale Ad-hoc Teamwork". In Proceedings of the 3rd International Conference on Agents (ICA 2018), July 2018.
- 15. (Double 1st author) A. R. Tavares, S. Anbalagan, L. S. Marcolino and L. Chaimowicz. "Algorithms or Actions? A Study in Large-Scale Reinforcement Learning". In Proceedings of the 27th International Joint Conference on Artificial Intelligence (IJCAI 2018), July 2018.
- 16. (Double 1st author) A. Yadav, R. Noothigattu, E. Rice, L. Onasch-Vera, L. S. Marcolino, M. Tambe. "Please be an Influencer? Contingency-Aware Influence Maximization". In Proceedings of the Seventeenth International Conference on Autonomous Agents & Multi-agent Systems (AAMAS 2018), July 2018.
- 17. (Double 1st author) M. Escarce Junior, G. R. Martins, L. S. Marcolino, Y. T. dos Passos. "Emerging Sounds Through Implicit Cooperation: A Novel Model for Dynamic Music Generation". In Proceedings of the 13th AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment (AIIDE 2017), Utah, USA, October 2017.
- 18. D. J. Gerber, E. Pantazis, L. S. Marcolino. "Design Agency: Prototyping Multi-Agent Systems in Architecture". In Proceedings of the 16th CAAD Futures Conference, July 2015.
- 19. (Double 1st author) V. Nagarajan, L. S. Marcolino, M. Tambe. "Every team deserves a second chance: Identifying when things go wrong.". In Proceedings of the 14th International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2015), May 2015.
- 20. A. Yadav, L. S. Marcolino, E. Rice, R. Petering, H. Winetrobe, H. Rhoades, M. Tambe, H. Carmichael. "Preventing HIV Spread in Homeless Populations using PSINET Emerging Application Case Study". In Proceedings of the 27th Conference on Innovative Applications of Artificial Intelligence (IAAI 2015), Texas, USA.
- 21. $(\alpha \beta)$ A. X. Jiang, L. S. Marcolino, A. D. Procaccia, T. Sandholm, N. Shah, and M. Tambe. "Diverse randomized agents vote to win". In Proceedings of the 28th Neural Information Processing Systems Conference (NIPS 2014), Québec, Canada, December 2014.

- 22. L. S. Marcolino, H. Xu, A. X. Jiang, M. Tambe, and E. Bowring. "Give a Hard Problem to a Diverse Team: Exploring Large Action Spaces". In Proceedings of the 28th Conference on Artificial Intelligence (AAAI 2014), Québec, Canada, July 2014.
- 23. L. S. Marcolino, A. X. Jiang, and M. Tambe. "Multi-Agent Team Formation: Diversity Beats Strength?". In Proceedings of the 23rd International Joint Conference on Artificial Intelligence (IJCAI 2013), Beijing, China, August 2013.
- 24. L. S. Marcolino, H. Matsubara. "Multi-Agent Monte Carlo Go". In Proceedings of the Tenth International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2011), Taipei, Taiwan, May 2011. (Best paper nominee; 4 out of 127 full papers and 575 submissions)
- 25. L. S. Marcolino, L. Chaimowicz. "Traffic Control for a Swarm of Robots: Avoiding Group Conflicts". In Proceedings of the 2009 IEEE International Conference on Intelligent Robots and Systems (IROS 2009), St. Louis, MO, October 2009, pages 1949-1954.
- 26. L. S. Marcolino, L. Chaimowicz. "Traffic Control for a Swarm of Robots: Avoiding Target Congestion". In Proceedings of the 2009 IEEE International Conference on Intelligent Robots and Systems (IROS 2009), St. Louis, MO, October 2009, pages 1955-1961.
- 27. L. S. Marcolino, L. Chaimowicz. "Experiments in the Coordination of Large Groups of Robots". In Proceedings of the 19th Brazilian Symposium on Artificial Intelligence: Advances in Artificial Intelligence (SBIA '08), Gerson Zaverucha and Augusto Loureiro Costa (Eds.), Springer-Verlag, Berlin, Heidelberg, pages 268-277.
- L. S. Marcolino, L. Chaimowicz. "No Robot Left Behind: Coordination to Overcome Local Minima in Swarm Navigation". In Proceedings of the 2008 IEEE International Conference on Robotics and Automation (ICRA 2008), Pasadena, California, May 2008, pages 1904-1909.

Book Chapters

- 29. L. S. Marcolino, H. Xu, D. Gerber, B. Kolev, S. Price, E. Pantazis, M. Tambe. "Multi-agent Team Formation for Design Problems". In Coordination, Organizations, Institutions and Norms in Agent Systems XI. Springer-Verlag Lecture Notes in AI, 2016.
- 30. L. S. Marcolino, H. Xu, A. X. Jiang, M. Tambe, and E. Bowring. "The Power of Teams that Disagree: Team Formation in Large Action Spaces". In Coordination, Organizations, Institutions and Norms in Agent Systems X. Springer-Verlag Lecture Notes in AI, 2015.
- 31. L. S. Marcolino, C. Zhang, A. X. Jiang, and M. Tambe. "A Detailed Analysis of a Multi-Agent Diverse Team". In T. Balke, A. Chopra, F. Dignum and B. van Riemsdijk, editors. Coordination, Organizations, Institutions and Norms in Agent Systems IX. Springer-Verlag Lecture Notes in AI, 2014
- 32. L. S. Marcolino, B. R. G. M. Couto, M. A. dos Santos. "Genome Visualization in Space". In Proceedings of the 4th International Workshop on Practical Applications of Computational Biology & Bioinformatics (IWPACBB), 2010. Published in Advances in Bioinformatics Advances in Soft Computing, M. Rocha, F. Riverola, H. Shatkay, and J. Corchado (Eds.), Springer-Verlag, volume 74, pages 225-232, Berlin, Heidelberg, 2010.

Symposium Papers

- 33. T. M. Grabe, F. R. Inácio, **L. S. Marcolino**, D. G. Macharet, L. Chaimowicz. "Stand by me: Learning to keep cohesion in the navigation of heterogeneous swarms". In the 4th International Symposium on Swarm Behavior and Bio-Inspired Robotics (SWARMS 2021), June 2021.
- 34. E. S. Yourdshahi, P. P. Angelov, L. S. Marcolino, G. Tsianakas. "Towards Evolving Cooperative Mapping for Large-Scale UAV Teams". In 2018 IEEE Symposium Series on Computational Intelligence (SSCI), January 2019.
- 35. D. J. Gerber, E. Pantazis, L. S. Marcolino, A. Heydarian. "A Multi-Agent Systems for Design Simulation Framework: Experiments with Virtual-Physical-Social Feedback for Architecture". In Proceedings of the 6th Symposium on Simulation for Architecture and Urban Design (SimAUD 2015), April 2015.

Short Conference Papers & Demonstrations

- 36. M. A. C. Alves, A. Varma, Y. Elkhatib, L. S. Marcolino. "AdLeap-MAS: An Open-source Multi-Agent Simulator for Ad-hoc Reasoning". In Proceedings of the 21st International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2022), May 2022.
- 37. E. S. Yourdshahi, M. A. C. Alves, **L. S. Marcolino**, P. Angelov. "On-line Estimators for Ad-hoc Task Allocation: Extended Abstract". In Proceedings of the 19th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2020), May 2020.
- 38. S. A. Silva, S. R. Dias, **L. S. Marcolino**. "Bang: A System for Training and Visualization in Multiagent Team Formation". In Proceedings of the 16th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2017), May 2017. (Demonstration)
- 39. L. S. Marcolino, A. Lakshminarayanan, A. Yadav, and M. Tambe. "Simultaneous influencing and mapping social networks". In Proceedings of the 15th International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2016), May 2016. (Short Paper)
- 40. G. R. Martins, M. Escarce Junior, L. S. Marcolino. "Jikan to Kukan: A Hands-on Musical Experience in AI, Games and Art". In Proceedings of the 30th Conference on Artificial Intelligence (AAAI 2016), February 2016. (Demonstration)
- 41. L. S. Marcolino, M. Tambe. "Unleashing the Power of Multi-Agent Voting Teams". In Proceedings of the 24th International Joint Conference on Artificial Intelligence (IJCAI 2015), Buenos Aires, Argentina, July 2015. (Doctoral Consortium)
- 42. L. S. Marcolino, M. Tambe. "Three Fundamental Pillars of Multi-Agent Team Formation". In Proceedings of the 14th International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2015), May 2015. (Doctoral Consortium).
- 43. L. S. Marcolino, V. Nagarajan, M. Tambe. "Every Team Deserves a Second Chance: An Interactive 9x9 Go Experience". In Proceedings of the 14th International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2015), May 2015. (Demonstration)
- 44. V. Nagarajan, L. S. Marcolino, M. Tambe. "Every team deserves a second chance: Identifying when things go wrong (Student Abstract Version)". In Proceedings of the 29th Conference on Artificial Intelligence (AAAI 2015), Texas, USA, January 2015. (Student Abstract)
- 45. L. S. Marcolino. "Multi-Agent Team Formation: Solving Complex Problems by Aggregating Opinions". In Proceedings of the 29th Conference on Artificial Intelligence (AAAI 2015), Texas, USA, January 2015. (Doctoral Consortium)
- 46. L. S. Marcolino, D. Chen, A. X. Jiang, M. Tambe. "Diversity Beats Strength? A Hands-on Experience with 9x9 Go". In Proceedings of the 12th International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2013), Ito, Jonker, Gini, and Shehory (eds.), May, 6-10, 2013, Saint Paul, Minnesota, USA. (Demonstration)
- 47. B. R. G. M. Couto, M. A. Boaventura, **L. S. Marcolino**, M. A. dos Santos, "Visualizing high dimensional and multivariate data applying singular value decomposition followed by optimization". In the 6th International Conference of Brazilian Association for Bioinformatics and Computational Biology (X-Meeting 2010). Ouro Preto, MG, Brazil, November 2010. (Abstract only, poster presentation).
- 48. L. S. Marcolino, L. Chaimowicz, "A Coordination Mechanism for Swarm Navigation: Experiments and Analysis". In Proceedings of the Seventh International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2008), Estoril, Portugual, May 2008, pages 1203-1206 (Short Paper).

Workshop Papers

- 49. A. Kerim, L. S. Marcolino, R. Jiang. "Silver: Novel Rendering Engine for Data Hungry Computer Vision Models". In the 2nd International Workshop on Data Quality Assessment for Machine Learning, August 2021.
- 50. E. S. Yourdshahi, M. A. C. Alves, L. S. Marcolino, P. Angelov. "Decentralised Task Allocation in the Fog: Estimators for Effective Ad-hoc Teamwork". In the 11th International Workshop on Optimization and Learning in Multiagent Systems (OptLearnMAS 2020), May 2020.

- 51. M. Escarce Junior, G. R. Martins, L. S. Marcolino, Y. T. dos Passos. "Blind Creation: Emerging Music Through Implicit Collaboration". In the 1st AAMAS Workshop on Teams in Multiagent Systems (TEAMAS), May 2017, São Paulo, Brazil.
- 52. L. S. Marcolino, A. Lakshminarayanan, A. Yadav, and M. Tambe. "Simultaneous Influencing and Mapping for Health Interventions". In the 3rd Workshop on Expanding the Boundaries of Health Informatics Using AI (HIAI'16), February 2016.
- 53. L. S. Marcolino, V. Nagarajan and M. Tambe. "Every Team Makes Mistakes, in Large Action Spaces". In the 9th Multidisciplinary Workshop on Advances in Preference Handling (M-PREF 2015), Buenos Aires, Argentina, July 2015.
- 54. L. S. Marcolino, H. Xu, D. Gerber, B. Kolev, S. Price, E. Pantazis, M. Tambe. "Agent Teams for Design Problems". In the 19th International Workshop on Coordination, Organisations, Institutions and Norms (COIN 2015), May 2015.
- 55. V. Nagarajan, L. S. Marcolino, M. Tambe. "Every Team Makes Mistakes: An Initial Report on Predicting Failure in Teamwork". In the AAAI Workshop Learning for General Competency in Video Games (AAAI 2015), Texas, USA, January 2015.
- 56. L. S. Marcolino, D. Gerber, B. Kolev, S. Price, E. Pantazis, Y. Tian, M. Tambe. "Agents vote for the environment: Designing energy-efficient architecture". In the AAAI Workshop on Computational Sustainability (AAAI 2015), Texas, USA, January 2015.
- 57. A. Yadav, L. S. Marcolino, E. Rice, R. Petering, H. Winetrobe, H. Rhoades, M. Tambe, H. Carmichael. "PSINET An Online POMDP Solver for HIV Prevention in Homeless Populations". In the AAAI-15 Workshop on Planning, Search, and Optimization (PlanSOpt-15), Texas, USA, 2015.
- 58. L. S. Marcolino, B. Kolev, S. Price, S. P. Veetil, D. Gerber, J. Musil, M. Tambe. "Aggregating Opinions to Design Energy-Efficient Buildings". In the 8th Multidisciplinary Workshop on Advances in Preference Handling (M-PREF 2014), Québec, Canada, July 2014.
- 59. L. S. Marcolino, H. Xu, A. X. Jiang, M. Tambe, and E. Bowring. "Team Formation in Large Action Spaces". In 17th International Workshop on Coordination, Organisations, Institutions and Norms (COIN 2014), Paris, France, May 2014.
- 60. L. S. Marcolino, A. X. Jiang, and M. Tambe. "Diversity beats strength? Towards forming a powerful team". In 15th International Workshop on Coordination, Organisations, Institutions and Norms (COIN 2013), St. Paul, Minnesota, May 2013.

Thesis, Monographs & Dissertations

- 61. **L. S. Marcolino**. "Three Fundamental Pillars of Decision-Centered Teamwork", PhD Thesis, advised by M. Tambe. University of Southern California, March 2016.
- 62. L. S. Marcolino. "Multi-Agent Monte Carlo Go", Master's Thesis, advised by H. Matsubara. School of Systems Information Science at Future University Hakodate, Japan, August 2011.
- 63. L. S. Marcolino. "Traffic Control for a Swarm of Robots" ("Controle de Tráfego para um Enxame de Robôs"), Undergraduate Monograph, advised by L. Chaimowicz. Universidade Federal de Minas Gerais, Brazil, December 2008.

News Media Articles

64. **L. S. Marcolino**, R. Sahb. "Ten years on, the iPhone has taken us back as many steps as it has taken us forward". In The Conversation, January 9, 2017.

Technical Publications

- 1. L. S. Marcolino, M. R. Paula. "Metapackages of LibertasBR" ("Metapacotes do Libertas-BR"). 2005. Published as part of the project LibertasBR. In Portuguese.
- 2. L. S. Marcolino. "Creating a Personalized Debian CD Using Debian-CD" ("Gerando um CD Debian Personalizado com o Debian-CD"). 2005. Published as part of the project LibertasBR. In Portuguese.
- 3. L. S. Marcolino. "Introduction to Scribus" ("Introdução ao Scribus"). 2005. Published as part of the project LibertasBR. In Portuguese.

Mentoring

- I mentored the following students:
 - Ebtisaam Alharbi, Spring 2022~Present PhD Student at Lancaster University
 - Pankaj Goikar, Fall 2021~Present
 PhD Student at Lancaster University
 - Matheus Aparecido Do Carmo Alves, Spring 2021~Present
 PhD Student at Lancaster University
 Fall 2018~Spring 2019
 Undergraduate Research Visitor from Universidade de São Paulo (USP)
 - Abdulrahman Kerim, Fall 2020~Present PhD Student at Lancaster University
 - Mohammad Alsomali, Fall 2020~Present
 PhD Student at Lancaster University
 - Mário Escarce Junior, Summer 2020~Present
 PhD Student at Lancaster University
 Summer 2015~Spring 2016
 Undergraduate Game Design student at Universidade Fumec, Brazil
 - Ronghui Mu, Spring 2020~Present
 PhD Student at Lancaster University
 - Washington Luis de Souza Ramos, Spring 2019~Present
 PhD student at Universidade Federal de Minas Gerais (UFMG)
 - Yuri Tavares Dos Passos, Fall 2019~Present
 PhD Student at Lancaster University
 - Farid Bello, Fall 2018∼Present
 PhD Student at Lancaster University
 - Andrew Blower, Fall 2017~Present
 PhD Student at Lancaster University Spring 2017
 MSCi Student at Lancaster University
 - Lukasz Pelcner, Spring 2020~Present
 PhD Student at Lancaster University
 Summer 2019~Fall2019
 Research Volunteer
 Spring 2018~Spring 2019
 Undergraduate Student at Lancaster University
 - Elnaz Shafipour Yourdshahi, Fall 2016~Summer 2021
 PhD Student at Lancaster University
 - Robert Hope, Summer 2021~Present
 MSc Computer Science by Research student at Lancaster University

- Gao Peng, Summer 2021~Present
 MSc Computer Science by Research student at Lancaster University
- Thiago Grabe, Spring 2020~Present
 Computer Science Masters student at Universidade Federal de Minas Gerais (UFMG)
- Marcelo Lemos, Spring 2021~Present
 Computer Science Masters student at Universidade Federal de Minas Gerais (UFMG)
- Sagar Kishore, Summer 2022
 MSc Data Science student at Lancaster University
- Samuel Hardy, Summer 2021
 MSc Data Science student at Lancaster University
 Fall 2019~Spring 2020
 Undergraduate Computer Science student at Lancaster University
- Zheng Wang, Summer 2020
 MSc Data Science student at Lancaster University
- Rhiannon Walmsley, Summer 2020
 MSc Data Science student at Lancaster University
- Shaling Li, Spring 2019∼Summer 2019
 MSc Data Science student at Lancaster University
- Oleksa Stepaniuk, Summer 2019
 MSc Data Science student at Lancaster University
- Ierotheos Tsantilas, Summer 2019
 MSc Data Science student at Lancaster University
- Xavier Duquesne, Summer 2019
 MSc Data Science student at Lancaster University
- Amokh Varma, Summer 2020~Present
 Undergraduate Research Volunteer (remote) from Indian Institute of Technology, Delhi.
- Luigi Lin, Summer 2020
 Undergraduate Research Volunteer from Lancaster University
- Alex Stanhope, Fall 2020~Spring 2021
 Undergraduate Computer Science student at Lancaster University
- Aris Melkonidis, Fall 2020~Spring 2021
 Undergraduate Computer Science student at Lancaster University
- Ross Tinsley, Fall 2020~Spring 2021
 Undergraduate Computer Science student at Lancaster University
- Lucy Lawrence, Fall 2020~Spring 2021
 Undergraduate Computer Science student at Lancaster University
- Thomas Daffern, Fall 2019∼Spring 2020
 Undergraduate Computer Science student at Lancaster University
- Michael Andrew Heaver, Fall 2019~Spring 2020
 Undergraduate Computer Science student at Lancaster University
- Jamie Joule, Fall 2019∼Spring 2020
 Undergraduate Computer Science student at Lancaster University
- Paul Kenneth Alexander Partington, Fall 2019~Spring 2020
 Undergraduate Computer Science student at Lancaster University
- Adam Brownlow, Fall 2018~Spring 2019
 Undergraduate Computer Science student at Lancaster University
- Charchit Dhawan, Spring 2021~Summer 2021
 Undergraduate Research Visitor (remote) from IIIT Naya Raipur, India

- Minakshee Shukla, Spring 2020~Summer 2020
 Undergraduate Research Visitor from IIIT Naya Raipur, India
- Chris Lawson, Spring 2020
 Research intern at Lancaster University
- Luca Machado Bottino, Fall 2019~Spring 2020
 Undergraduate Research Visitor from Universidade de São Paulo (USP)
- Tahreem Haque, Spring 2019
 Undergraduate Research Visitor from the Heritage Institute of Technology, India
- Caio Ferreira Bernardo, Fall 2018∼Spring 2019
 Undergraduate Research Visitor from Universidade de São Paulo (USP)
- Thomas Cann, Spring 2019
 Research intern at Lancaster University
- Sam Hinson, Spring 2019
 Research intern at Lancaster University
- Matthew Threlfall, Summer 2018
 Undergraduate Research Assistant at Lancaster University
- Edmund Moore, Spring 2018~Summer 2018
 Master's Student at Lancaster University
- Anaid Villamizar, Spring 2018∼Summer 2018
 Master's Student at Lancaster University
- Shuxing Zhou, Spring 2018~Summer 2018
 Master's Student at Lancaster University
- Thomas Pinder, Spring 2018∼Summer 2018
 Master's Student at Lancaster University
- Zach Tarbah, Spring 2018~Summer 2018
 Master's Student at Lancaster University
- Thomas McCracken, Spring 2018
 MSCi Student at Lancaster University
- Gauri Dhawan, Winter 2017
 Undergraduate Research Visitor from the Vellore Institute of Technology, India.
- Alex Collins, Fall 2017~Spring 2018
 Undergraduate Student at Lancaster University
- Peter Keves, Fall 2017~Spring 2018
 Undergraduate Student at Lancaster University
- Mark McElroy, Fall 2017~Spring 2018
 Undergraduate Student at Lancaster University
- Daniel Farrell, Spring 2017
 MSCi Student at Lancaster University
- Siva Anbalagan, Spring 2017~Summer 2017
 MSc Data Science student at Lancaster University
- James Leith, Summer 2017
 MSc Data Science student at Lancaster University
- Daniel Carter, Summer 2017
 MSc Data Science student at Lancaster University
- Saulo Antunes Silva, Fall 2016~Spring 2017
 CEFET-MG Undergraduate Student

- Rodrigo Novaes, Spring 2017
 CEFET-MG Undergraduate Student
- Aravind Lakshminarayanan, Summer 2015~Spring 2016
 Undergraduate Electrical Engineer student at Indian Institute of Technology Madras, India
- Georgia Rossmann Martins, Summer 2015~Spring 2016
 Undergradute Game Design student at Universidade Fumec, Brazil
- Vaishnavh Nagarajan, Summer 2014~Winter 2014
 Undergraduate Computer Science student at Indian Institute of Technology Madras, India
- Samori Price, Spring 2014~Fall 2014
 Undergraduate Computer Science student at California State University, Dominguez Hills
- Boian Kolev, Spring 2014~Fall 2014
 Undergraduate Computer Science student at California State University, Dominguez Hills
- Álvaro Souza, Fall 2013∼Fall 2014
 Undergraduate Computer Science student at Universidade Federal de Minas Gerais, Brazil
- Douglass Chen, Spring 2013
 Undergraduate Computer Science student at University of Southern California

Reviewing

- Senior PC member for AAMAS 2023
- PC member for AAAI 2022
- PC member for AAMAS 2022
- PC member for UAI 2022
- PC member for IJCAI 2022
- PC member for BMVC 2022
- Reviewer for ICRA 2022
- Reviewer for Robotics & Autonomous Systems, 2022
- Reviewer for Revista de Informática Teórica e Aplicada RITA, 2021
- PC member for AAMAS 2021
- PC member for AIIDE 2021
- PC member for CVPR 2021
- Reviewer for RA-L/ICRA 2021
- PC member for AAAI 2021
- Reviewer for Journal of Intelligent & Robotic Systems, 2020
- PC member for AIIDE 2020
- PC member for PAAMS 2020
- PC member for AAMAS 2020
- PC member for IRC 2020
- PC member for ECAI 2020
- Reviewer for ICRA 2020
- PC member for AAAI 2020
- PC member for ICA 2019
- Reviewer for JAAMAS 2019

- PC member for AIIDE 2019
- Peer reviewer for three Applied Sciences papers, 2019
- Senior PC member for IJCAI 2019
- PC member for AAMAS 2019
- PC member for IRC 2019
- PC member for the 2019 Workshop on Health Intelligence (W3PHIAI 2019)
- Peer reviewer for Swarm Intelligence, 2018
- PC member for PRIMA 2018
- PC member for ICA 2018
- Peer reviewer for Children and Youth, 2018
- PC member for the 2018 Workshop on Health Intelligence (W3PHIAI 2018)
- Peer reviewer for two Robotics and Autonomous Systems papers, 2018
- PC Member for PAAMS 2018
- Peer reviewer for CRC Press Book Proposal, 2018
- Peer reviewer for two Applied Sciences papers, 2018
- PC Member for AAMAS 2018 Demo Track
- PC member for AAMAS 2018 Robotics Track
- PC member for AAAI 2018
- Senior PC member for IJCAI 2017
- PC member for TEAMAS 2017
- PC member for ICA 2017
- PC member for AAMAS 2017 Doctoral Consortium
- Peer reviewer for Sensors 2017
- Peer reviewer for Technologies 2017
- PC member for PAAMS 2017
- Peer reviewer for JAIR 2016
- PC member for ICA 2016
- PC member for PRIMA 2016
- Peer reviewer for JAAMAS 2016
- PC member for IJCAI 2016
- PC member for AAMAS 2016
- PC member for IAT 2015
- Peer reviewer for JAIR 2015
- Peer reviewer for three IJCAI 2015 papers
- Peer reviewer for SBAI 2011
- Peer reviewer for Computational Intelligence 2009
- Peer reviewer for IROS 2009
- Peer reviewer for ICRA 2009

Successful Proposals

• "Cooperative Localisation and Distributed Control of UAV Swarms", Innovate UK proposal, with DSTL. Principal Investigator. Co-managed with Plamen Angelov. January 2017 to June 2017.

Conference Organization

 $AAMAS\ 2021$ June 2020~May 2021

• Virtual Engagement Chair

AAMAS 2020 May 2020

• Volunteer, manager of Discord Server to allow for participant interactions.

Workshop Organization

TEAMAS Workshop, Teams in Multiagent Systems

May 2017

• Co-chaired with Ewa Andrejczuk and Juan M. Alberola. This workshop was part of the AAMAS'2017 conference.

Tutorials

"Truth Revealing Social Choice"

May 2015

Presented at the 14th International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2015)

• Co-organizer and presenter, with Lirong Xia and Toby Walsh.

Participation in Panels

- Invited member for IJCAI 2018 Doctoral Consortium Panel, July 2018.
- Invited panellist and mentor for AAMAS 2018 Doctoral Consortium, July 2018.

Editorship

TEAMAS Special Issue, in Fundamenta Informaticae

May 2020

Co-editor with Ewa Andrejczuk and Juan M. Alberola. The special issue presents extended versions
of selected papers from the TEAMAS workshop.

Participation in Committees (selected)

- Kourosh Borhani, MSc Computer Science by Research proposal, Sunway University, 2021
- Bing Xu, PhD 1-year evaluation panel, Lancaster University, 2021
- Tan Kai Wei, MSc in Computer Science by Research proposal, Sunway University, 2021
- Matt Davis, BSc Computer Science Final Year Project, Lancaster University, 2020
- Kiera Mascall, BSc Computer Science Final Year Project, Lancaster University, 2020
- Imaad Phoplunker, BSc Computer Science Final Year Project, Lancaster University, 2020
- Hemanshu Solanki, BSc Computer Science Final Year Project, Lancaster University, 2020
- Mike Stanton, BSc Computer Science Final Year Project, Lancaster University, 2020

- Bruno Barbosa Miranda de Paiva, MSc Computer Science, Universidade Federal de Minas Gerais (UFMG), 2020
- Ronaldo Vieira, MSc Computer Science, Universidade Federal de Minas Gerais (UFMG), 2020
- Renato Fernando dos Santos, PhD Computer Science Dissertation Proposal, Universidade Federal de Minas Gerais (UFMG), 2020
- Bibi Aamirah, MSc Computer Science by Research proposal, Sunway University, 2020
- Faizan Rasheed, MSc Computer Science by Research, Sunway University, 2020
- Anna-Sophie Bartle, Erasmus Final Year Project, Master of Arts, Computational Linguistics, Lancaster University and University of Tübingen.
- Rawan Abdulelsadig, MSc Data Science Thesis, Lancaster University, 2020
- Mishra Pritam, MSc Data Science Thesis, Lancaster University, 2020
- Au Ka Long, BSc (Hons) Accounting, Finance and Computer Science Final Year Project, Lancaster University, 2020
- Salman Farooq, BSc Computer Science Final Year Project, Lancaster University, 2020
- Jawad Shafi, PhD thesis, internal examiner, Lancaster University, 2019
- Waheed Mihsaan, MSc in Computer Science by Research, Sunway University, 2019
- Christopher Hicks, MSCi thesis, Lancaster University, 2019
- Tan Zhi Zhong, MSc in Computer Science by Research, Sunway University, 2019
- Harry Baines, BSc Computer Science Final Year Project, Lancaster University, 2019
- Rubens de Oliveira Moraes Filho, Master's thesis, Universidade Federal de Viçosa, 2019
- Faizan Rasheed, MSc in Computer Science by Research proposal, Sunway University, 2019
- Hristo Valey, PhD 1-year evaluation panel, Lancaster University, 2019
- Nicholas Arnold, PhD 1-year evaluation panel, Lancaster University, 2019
- AAMAS Demo Awards, Stockholm, Sweden, July 2018
- Thomas James Donnellon, MSCi Computer Science thesis, Lancaster University, 2018
- Mustafa Mohamed, MSCi Computer Science thesis, Lancaster University, 2018
- Saarim Aatri Sadla, MSCi Computer Science thesis, Lancaster University, 2018
- Paul Allan Dean, MSc Computer Science, Lancaster University, 2018
- Matthew Threlfall, BSc Computer Science Final Year Project, Lancaster University, 2018
- Christopher Hicks, BSc Computer Science Final Year Project, Lancaster University, 2018
- Chen Eric, BSc Computer Science Final Year Project, Lancaster University, 2018
- Shanmuga Pillai, MSc in Computer Science by Research, Sunway University, 2018
- Alwin Kumar Rathinam, MSc in Computer Science by Research, Sunway University, 2018
- Duc Nguyen Tu Ngo, MSc Data Science thesis, Lancaster University, 2017
- Katie Hayes, MSc Data Science thesis, Lancaster University, 2017
- Sam Vinall, MSc Data Science thesis, Lancaster University, 2017
- Snehal Nair, MSc Data Science thesis, Lancaster University, 2017
- Tan Zhi Zhong, MSc in Computer Science by Research proposal, Sunway University, 2017
- Alwin Kumar Rathinam, MSc in Computer Science by Research proposal, Sunway University, 2017
- Daniel Farrell, MSCi thesis, Lancaster University, 2017
- Harry Messenger, MSCi thesis, Lancaster University, 2017
- Liam Rushton, MSCi thesis, Lancaster University, 2017

- Mateus Andrade Rezende, Master's thesis, Universidade Federal de Minas Gerais, 2017
- Abdul Waleed, Ammar Umer, Shahzaib Imran, Undergraduate Monograph, COMSATS Institute of Information Technology, 2017
- Ashutosh Puri, MSc Data Science thesis, Lancaster University, 2017
- Gu Xiaowei, PhD 1-year evaluation panel, Lancaster University, 2017
- Waheed Mihsaan, MSc in Computer Science by Research proposal, Sunway University, 2016
- Abdul Waleed, Ammar Umer, Shahzaib Imran, Undergraduate Monograph proposal, COMSATS Institute of Information Technology, 2016

Teaching Experience

Lecturer Fall $2016 \sim \text{Present}$

Lancaster University

- SCC 461 Programming for Data Scientists. Teaching Python programming. (Fall 2016 ~ Present)
- SCC 462 Distributed Artificial Intelligence. (Fall 2016 ~ Present)
- SCC 403 Data Mining. (Fall 2017 \sim Fall 2019)
- Welcome Week, Introduction to Python Programming. (October 2019, October 2020, October 2021)

Teaching Assistant Spring 2014

University of Southern California

 Assistant for the graduate course CS543: Software Multi-Agent Systems, with professor Milind Tambe. Gave lectures, marked and developed questions for assignments, besides assisting students at office hours.

Other Experience

MSc Data Science Deputy Director

Lancaster University

• Deputy Director of the MSc Data Science program at Lancaster University.

PhD Admissions Panel member

September 2019~September 2021

Lancaster University

• Member of admissions panel for PhD and Masters by Research in Computer Science in the School of Computing and Communications.

RingMind Project

September 2018~Present

September 2021~Present

Lancaster University

- Participant of the RingMind project, an interdisciplinary arts-humanities-science research project on the self-organising powers of planetary rings. The project is a collaboration between Sociology, Physics and the School of Computing and Communication at Lancaster University and independent digital artists. It has been showcased at the following events:
 - School of Computing and Communications demo (Lancaster, UK) June 2022.
 - Life Forms (Berlin, DE) April 2019. (http://hkw.de)
 - Festival of Noises (Barrow, UK) August 2019. (http://fonfestival.org)
 - Light Up Lancaster (Lancaster, UK) November 2019. (http://lightuplancaster.co.uk)

STEM Challenge Day Organiser

March 2018, March 2019

Lancaster University

• Organising and running the STEM Challenge Day, where Year 9 students compete in a Computer Science challenge.

Lancaster Code Club

October 2016 \sim May 2020

Lancaster University

• Managing the Lancaster Code Club, where undergraduate students are assigned to teach programming at local primary schools.

Data Science and Math Study Group seminars organiser

October 2017 \sim Present

Lancaster University

 Organiser of seminars about Artificial Intelligence and Machine Learning, and discussion groups about Mathematics.

CNPQ Technological Development Scholarship

February 2005 \sim November 2005

Universidade Federal de Minas Gerais

• Assisted in the development of "LibertasBR", an open source Linux distribution targeted towards "Telecenters" (public spaces that encourage social development by giving free and open access to computers and Internet).

Volunteer

October 2004~January 2005

Universidade Federal de Minas Gerais

• Worked as a volunteer in the project "LibertasBR", described above.

Selected Presentations

- Invited talk at Universidade Federal de Minas Gerais (UFMG), August 2022

 Presented the work "On the Throughput of the Common Target Area for Robotic Swarm Strategies"
- Invited talk at Universidade Federal de Goiás, September 2020 Presented the work "Real-time Learning and Planning in Environments with Swarms: A Hierarchical and a Parameter-based Simulation Approach"
- 19th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2020), Online, May 2020
 - Presented the work "Real-time Learning and Planning in Environments with Swarms: A Hierarchical and a Parameter-based Simulation Approach"
- Invited Talk at Universidade Federal de Minas Gerais (UFMG), October 2019

 Presented the work "Real-time Learning and Planning in Environments with Swarms: A Hierarchical and a Parameter-based Simulation Approach"
- Invited Talk at Universidade Federal de Minas Gerais (UFMG), April 2019 Presented the work "On-line Learning and Planning in Multi-agent Systems"
- Invited class at Universidade Federal de Minas Gerais (UFMG), April 2019 Presented about Monte Carlo Tree Search
- Invited Talk at Centro Federal de Educação Tecnológica de Minas Gerais (CEFET-MG), April 2019 Presented the work "On-line Learning and Planning in Multi-agent Systems"
- Invited Talk at Universidade Federal de Viçosa (UFV), April 2019 Presented the work "On-line Learning and Planning in Multi-agent Systems"
- Invited Talk at Universidade de São Paulo, São Carlos (USP), April 2019 Presented the work "Three Fundamental Pillars of Decision-Centered Teamwork"
- Invited Talk at Southampton University, United Kingdom, September 2018 Presented the work "Three Works on Multi-agent "Team" Work"
- 27th International Joint Conference on Artificial Intelligence (IJCAI 2018), Stockholm, Sweden, July 2018

Presented the work "Algorithms or Actions? A Study in Large-Scale Reinforcement Learning"

- Invited Talk at Alberta University, Canada, October 2017
 Presented the work "Three Fundamental Pillars of Decision-Centered Teamwork"
- Invited Talk at Chulalongkorn University, Thailand, September 2017
 Presented the work "Three Fundamental Pillars of Decision-Centered Teamwork"
- 1st AAMAS Workshop on Teams in Multiagent Systems (TEAMAS), May 2017 Presented the work "Blind Creation: Emerging Music Through Implicit Collaboration"
- Invited Talk at Universidade Federal de Minas Gerais (UFMG), May 2017 Presented the work "Three Fundamental Pillars of Decision-Centered Teamwork"
- Invited Talk at Universidade Federal de Viçosa (UFV), May 2017
 Presented the work "Three Fundamental Pillars of Decision-Centered Teamwork"
- Invited Talk at the Institute for Creative Technologies (ICT), September 2015 Presented the work "Unleashing the Power of Multi-Agent Voting Teams"
- 24th International Joint Conference on Artificial Intelligence (IJCAI 2015), Buenos Aires, Argentina, July 2015, Doctoral Consortium
 - Presented the work "Unleashing the Power of Multi-Agent Voting Teams"
- 24th International Joint Conference on Artificial Intelligence (IJCAI 2015), Buenos Aires, Argentina, July 2015, M-PREF Workshop
 - Presented the work "Every Team Makes Mistakes, in Large Action Spaces"
- AI/ML seminar series at University of California, Irvine (UCI), June 2015 Presented the work "Unleashing the Power of Multi-Agent Voting Teams"
- 14th International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2015), Istanbul, Turkey, May 2015
 - Co-presented the tutorial "Truth Revealing Social Choice", with Toby Walsh
- 14th International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2015), Istanbul, Turkey, May 2015, Doctoral Consortium
 - Presented the work "Three Fundamental Pillars of Multi-Agent Team Formation"
- 14th International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2015), Istanbul, Turkey, May 2015, COIN Workshop
 Presented the work "Agent Teams for Design Problems".
- 14th International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2015), Istanbul, Turkey, May 2015
 - Presented the work "Every Team Deserves a Second Chance: Identifying when Things Go Wrong"
- 14th International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2015), Istanbul, Turkey, May 2015
 - Presented the demonstration "Every Team Deserves a Second Chance: An Interactive 9x9 Go Experience"
- USC REACH event, Los Angeles, April 2015
 - Panelist in a Research Panel to motivate underrepresented minorities to pursue graduate degrees
- USC Computer Science Lectures Series, April 2015
 Presented the work "Multi-Agent Systems in ACTION!"
- 29th Conference on Artificial Intelligence (AAAI 2015), Texas, USA, January 2015, Student Abstract Track
 - Presented the work "Every team deserves a second chance: Identifying when things go wrong (Student Abstract Version)"
- 29th Conference on Artificial Intelligence (AAAI 2015), Texas, USA, January 2015, Doctoral Consortium
 - Presented the work "Multi-Agent Team Formation: Solving Complex Problems by Aggregating Opinions."

- AAAI Workshop Learning for General Competency in Video Games, Texas, USA, January 2015
 Presented the work "Every Team Makes Mistakes: An Initial Report on Predicting Failure in Teamwork"
- AAAI Workshop on Computational Sustainability, Texas, USA, January 2015
 Presented the work "Agents vote for the environment: Designing energy-efficient architecture"
- 28th Neural Information Processing Systems Conference, Québec, Canada, December 2014
 Presented the poster "Diverse randomized agents vote to win."
- USC Computer Science Lectures Series, October 2014

 Presented the work "Agents vote for the environment: Designing energy-efficient architecture."
- MPE 2013+ Workshop on Data-aware Energy Use, San Diego, California, September 2014
 Presented the work "Agents vote for the environment: Designing energy-efficient architecture."
- 8th Multidisciplinary Workshop on Advances in Preference Handling (M-PREF 2014), Québec, Canada, July 2014
 - Presented the work "Aggregating Opinions to Design Energy-Efficient Buildings."
- 28th Conference on Artificial Intelligence (AAAI 2014), Québec, Canada, July 2014 Presented the work "Give a Hard Problem to a Diverse Team: Exploring Large Action Spaces."
- Invited lecture at public high school James A. Foshay Learning Center, April 2014
 Introduced basic concepts of programming, and the Python language, to underrepresented minorities.
- 23rd International Joint Conference on Artificial Intelligence (IJCAI 2013), Beijing, China, August 2013
 - Presented the work "Multi-Agent Team Formation: Diversity Beats Strength?"
- 12th International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2013), Saint Paul, Minnesota, May 2013

 Presented the demonstration "Diversity Beats Strength? A Hands-on Experience with 9x9 Go".
- 15th International Workshop on Coordination, Organizations, Institutions and Norms (COIN 2013), St. Paul, Minnesota, May 2013
 Presented the work "Diversity beats strength? Towards forming a powerful team"
- 10th International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS 2011), Taipei, Taiwan, May 2011

 Presented the work "Multi-Agent Monte Carlo Go".
- Fourth Computer Go UEC Cup, University of Electro-communications, Tokyo, Japan, November 2010 Participation with the software myGoD.
- Invited lecture at Universidade Federal de Minas Gerais, Belo Horizonte, Brazil, March 2010 Presented research on Computer Go and introduced the Japanese Government Scholarship
- Invited lecture at Faculdade Fabrai, Belo Horizonte, Brazil, March 2010
 Presented research on swarm coordination and introduced the Japanese Government Scholarship
- Invited lecture at Faculdade Anhanguera, Belo Horizonte, Brazil, March 2010

 Presented research on swarm coordination and introduced the Japanese Government Scholarship
- 2009 IEEE International Conference on Intelligent Robots and Systems, St. Louis, MO, October 2009 Presented the work "Traffic Control for a Swarm of Robots: Avoiding Group Conflicts" Presented the work "Traffic Control for a Swarm of Robots: Avoiding Target Congestion".
- XXIX Congresso da Sociedade Brasileira de Computação (XXIX Congress of the Brazilian Society of Computer Science), Bento Gonçalves, RS, Brazil, July 2009

 Presented the work "Coordination Algorithms for a Swarm of Robots" ("Algoritmos de Coordenação para Enxames de Robôs"). Participation as one of the papers selected for the XXVIII National Contest of Scientific Initiation (XXVIII Concurso de Trabalhos de Iniciação Científica).
- Invited lecture at Faculdade Cenecista, Sete Lagoas, Brazil, March 2009

 Presented research on swarm coordination and introduced the Japanese Government Scholarship

- XVII Scientific Initiation Week (XVII Semana de Iniciação Científica), Universidade Federal de Minas Gerais, Belo Horizonte, October 2008
 - Presented the work "Genome Visualization in Space" ("Visualização de Genomas no Espaço").
- XVII Scientific Initiation Week (XVII Semana de Iniciação Científica), Universidade Federal de Minas Gerais, Belo Horizonte, October 2008
 - Presented the work "Traffic Control for a Swarm of Robots" ("Controle de Tráfego para um Enxame de Robôs").
- Brazilian Symposium on Artificial Intelligence, Salvador, Brazil, October 2008
 Presented the work "Experiments in the Coordination of Large Groups of Robots".
- XVI Scientific Initiation Week (XVI Semana de Iniciação Científica), Universidade Federal de Minas Gerais, Belo Horizonte, October 2007
 - Presented the work "Navigation of a Swarm of Robots in Environments with Obstacles" ("Navegação de um Enxame de Robôs em Ambientes com Obstáculos").
- XV Scientific Initiation Week (XV Semana de Iniciação Científica), Universidade Federal de Minas Gerais, Belo Horizonte, October 2006
 - Presented the work "Navigation of Large Groups of Robots in Environments with Obstacles" ("Navegação de Grandes Grupos de Robôs em Ambientes com Obstáculos").

Languages

Japanese

- Certificate of Japanese Language Proficiency, Level 2, December 2010.
- Intensive Japanese Program, Japanese Language Center for International Students, Tokyo University of Foreign Studies, April 2009∼August 2009.
- Certificate of Japanese Language Proficiency, Level 3, December 2007.
- Certificate of Japanese Language Proficiency, Level 4, December 2006.
- Spanish: Intermediate Level
- Thai, Esperanto: Basic Level

Literary Publications

- 1. L. S. Marcolino, "O Grande Livro das Pessoas sem Nome" ("The Great Book of People Without Name"), 2013. In Portuguese. Short stories, published at Amazon.
- 2. L. S. Marcolino, "Vida" ("Life"), 2^{nd} edition, 2012. In Portuguese. A novel based on robotics, artificial intelligence and bioinformatics. Published at Amazon.
 - Originally published as: L. S. Marcolino, "Vida" ("Life"), Biblioteca24x7, São Paulo, Brazil, 1st edition, 182 pages, 2010. ISBN 978-8578934002.
- 3. L. S. Marcolino, "Michelle", in the "Antologia de Contos, 2003" (Short Stories Anthology, 2003). Universidade do Vale do Paraíba, 228 pages, 2003. ISBN 857586017. In Portuguese.
- 4. L. S. Marcolino, "Lágrimas de Coca-Cola" ("Coca-Cola Tears"), in the "Antologia Poética, 2003" (Poetic Anthology, 2003). Universidade do Vale do Paraíba, 99 pages, 2003. ISBN 8575860186. In Portuguese.