

# Leandro Soriano Marcolino

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**ORCID:** 0000-0002-3337-8611, **Scholar Profile:** <https://scholar.google.com/citations?user=PBzg9G4AAAAJ>

**Research Interests:** Artificial Intelligence, Machine Learning, Multi-agent Systems, Reinforcement Learning, On-line Learning, On-line Planning, Games, Robotics.

## 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.

## Teaching Certification

- Postgraduate Certificate in Academic Practice, Lancaster University, 2017~2018.
- Advance High Education Academy Fellow, 2017.

## Research Experience

*Assistant Professor* September 2025~Present  
VinUniversity

*Lecturer (Assistant Professor)* August 2016~September 2025  
Lancaster University

*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)* April 2009~August 2011  
Future University – Hakodate

- 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 Doctoral Thesis Award*, for my student Washington L. S. Ramos, from SIBGRAPI 2024 (Conference on Graphics, Patterns and Images, leading annual event in Latin America organised by the Brazilian Computer Society), October 2024.
- *Quality Champion Reviewer Award*  
From ECAI 2023, October 2023.
- *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

In the following, I mark with an \* the papers that were published with my PhD students.

#### Journal Papers

1. S. N. Matos, T. V. B. Pinto, R. Duarte, K. S. Albuquerque, A. G. Fonseca, C. M. Ranieri, **L. S. Marcolino**, G. Pessin, J. Ueyama. “Data-driven soft sensor development for ore type estimation in mineral crushing processes”. In Engineering Applications of Artificial Intelligence, volume 167, March 2026.
2. É. S. Pinto, S. N. Matos, M. Neiva, G. A. Santos, **L. S. Marcolino**, J. Ueyama, T. A. M. Euzébio, G. Pessin, P. V. Pritzelwitz, A. K. R. Segundo. “Development of a bench system with capacitive sensor, sample compression, and TinyML for iron ore moisture measurement”. In Scientific Reports, volume 15, number 1, November 2025.
3. \* Y. T. dos Passos, **L. S. Marcolino**. “Estimating the Expected Time to Enter and Leave a Common Target Area in Robotic Swarms”. In Mathematics, vol. 13, number 21, November 2025.

4. M. L. H. D. Lemos, R. e. S. Vieira, A. R. Tavares, **L. S. Marcolino**, L. Chaimowicz. “Enhancing deep reinforcement learning for scale flexibility in real-time strategy games”. In Entertainment Computing, vol. 52, January 2025.
5. \* R. Mu, **L. S. Marcolino**, Q. Ni, W. Ruan. “Enhancing robustness in video recognition models: Sparse adversarial attacks and beyond”. In Neural Networks, vol. 171, March 2024.
6. C. M. Ranieri, A. V. K. Foletto, R. D. Garcia, S. N. Matos, M. M. G. Medina, **L. S. Marcolino**, J. Ueyama. “Water level identification with laser sensors, inertial units, and machine learning”. In Engineering Applications of Artificial Intelligence, vol. 127, no. Part A, 107235. January 2024.
7. \* M. Escarce Junior, G. R. Martins, **L. S. Marcolino**, E. Rubegni. “The Aesthetics of Disharmony: Harnessing Sounds and Images for Dynamic Soundscapes Generation”. In ACM - PACMHCI CHI PLAY, vol. 7, no. CHI PLAY, 399, pp. 665-698, October 2023.
8. \* Y. T. Passos, X. Duquesne, **L. S. Marcolino**. “Congestion control algorithms for robotic swarms with a common target based on the throughput of the target area”. In Robotics and Autonomous Systems, vol. 159, 2023.
9. \* R. Mu, W. Ruan, **L. S. Marcolino**, Q. Ni. “3DVerifier: efficient robustness verification for 3D point cloud models”. In Machine Learning, 2022.
10. \* E. S. Yourdshahi, M. A. C. Alves, A. Varma, **L. S. Marcolino**, J. Ueyama, P. Angelov. “On-line 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.
11. \* 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.
12. 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].
13. \* 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.
14. \* 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.
15. 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.
16. **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.
17. **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.
18. **L. S. Marcolino**, L. Chaimowicz. “Coordination Algorithms for a Swarm of Robots” (“Algoritmos 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

19. 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

20. \* M. Alsomali, **L. S. Marcolino**, B. Porter, R. Rodrigues-Filho. “Dynamically Increasing Agents Set-Size in Bayesian Multi-agent Multi-armed Bandits Framework”. In Proceedings of the 25th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2026), May 2026.
21. \* E. Alharbi, A. Kerim, **L. S. Marcolino**, Q. Ni. “SD-CSFL: A Synthetic Data-Driven Conformity Scoring Framework for Robust Federated Learning”. In Proceedings of the IEEE/CVF Winter Conference on Applications of Computer Vision 2026 (WACV 2026), March 2026.
22. \* L. Pelcner, **L. S. Marcolino**, M. A. do Carmo Alves, P. Harrison, P. Atkinson. “Multi Objective Quantile Based Reinforcement Learning for Modern Urban Planning”. In Proceedings of the 34th International Joint Conference on Artificial Intelligence (IJCAI 2025), August 2025.
23. F. J. dos Santos Diniz, S. Neves Matos, J. Ueyama, **L. S. Marcolino**, E. J. da Silva Luz, G. Pessin. “Uncertainty Quantification in Measuring Ore Mass Flow Rate with Data-Driven Soft Sensors”. In Proceedings of the 2025 International Instrumentation and Measurement Technology Conference (IEEE I2MTC 2025), May 2025.
24. \* E. Alharbi, **L. S. Marcolino**, Q. Ni, A. Gouglidis. “Robust Knowledge Distillation in Federated Learning: Counteracting Backdoor Attacks”. In Proceedings of the 3rd IEEE Conference on Secure and Trustworthy Machine Learning (SaTML 2025), April 2025.
25. \* M. Alsomali, R. Rodrigues-Filho, **L. S. Marcolino**, B. Porter. “An Online Incremental Learning Approach for Configuring Multi-arm Bandits Algorithms”. In Proceedings of the 27th European Conference On Artificial Intelligence (ECAI 2024), October 2024.
26. \* M. A. do Carmo Alves, A. Varma, **L. S. Marcolino**, Y. Elkhatib. “It Is Among Us: Identifying Adversaries in Ad-hoc Domains Using Q-valued Bayesian Estimations”. In Proceedings of the 23rd International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2024), May 2024.
27. \* R. Mu, **L. S. Marcolino**, T. Zhang, Y. Zhang, X. Huang, W. Ruan. “ReCePS: Reward Certification for Policy Smoothed Reinforcement Learning”. In Proceedings of the 38th AAAI Conference on Artificial Intelligence (AAAI 24): Safe, Robust and Responsible AI (SRRAI) Special Track, February 2024.
28. \* A. Kerim, W. S. Ramos, **L. S. Marcolino**, E. R. Nascimento, R. Jiang. “Leveraging Synthetic Data to Learn Video Stabilization Under Adverse Conditions”. In Proceedings of the IEEE/CVF Winter Conference on Applications of Computer Vision (WACV 2024), January 2024.
29. \* M. A. C. Alves, A. Varma, Y. Elkathib, **L. S. Marcolino**. “Information-guided Planning: An Online Approach for Partially Observable Problems”. In Proceedings of the 37th Conference on Neural Information Processing Systems (NeurIPS 2023), December 2023.
30. M. L. Harry Diniz Lemos, R. E. S. Vieira, A. Rocha Tavares, **L. S. Marcolino**, L. Chaimowicz. “Scale-Invariant Reinforcement Learning in Real-Time Strategy Games”. In Proceedings of the 22nd Brazilian Symposium of Games and Digital Entertainment (SBGames 2023), November 2023.
31. \* E. Alharbi, **L. S. Marcolino**, A. Gouglidis, Q. Ni. “Robust Federated Learning Method against Data and Model Poisoning Attacks with Heterogeneous Data Distribution”. In Proceedings of the 26th European Conference on Artificial Intelligence (ECAI 2023), September 2023.
32. \* R. Mu, W. Ruan, **L. S. Marcolino**, G. Jin, Q. Ni. “Certified Policy Smoothing for Cooperative Multi-Agent Reinforcement Learning”. In Proceedings of the 37th AAAI Conference on Artificial Intelligence (AAAI-23), February 2023.
33. \* A. Kerim, F. Chamone, W. S. Ramos, **L. S. Marcolino**, E. R. Nascimento, R. Jiang. “Semantic Segmentation under Adverse Conditions: A Weather and Nighttime-aware Synthetic Data-based Approach”. In Proceedings of the 33rd British Machine Vision Conference (BMVC 2022), November 2022.
34. \* 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.

35. \* 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.
36. \* 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.
37. \* 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.
38. **(Double 1<sup>st</sup> 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.
39. **(Double 1<sup>st</sup> 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.
40. \* **(Double 1<sup>st</sup> 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.
41. 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.
42. **(Double 1<sup>st</sup> 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.
43. 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.
44.  $(\alpha - \beta)$  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.
45. **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.
46. **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.
47. **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)**
48. **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.
49. **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.

50. **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.
51. **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

52. **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.
53. **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.
54. **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.
55. **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

56. 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.
57. \* 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.
58. 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

59. \* M. Alsomali, **L. S. Marcolino**, B. Porter, and R. Rodrigues-Filho. “Decision-Making in Evolving Environments: A Bayesian Multi-Agent Bandit Framework”. In Proceedings of the 24th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2025), May 2025.
60. \* L. Pelcner, M. A. do Carmo Alves, **L. S. Marcolino**, P. Atkinson, P. Harrison. “Incentive-driven Multi-agent Reinforcement Learning Approach for Commons Dilemmas in Land-Use”. In Proceedings of the 25th International Conference on Principles and Practice of Multi-Agent Systems (PRIMA 2024), November 2024.
61. \* L. Pelcner, M. A. do Carmo Alves, **L. S. Marcolino**, P. Harrison, P. Atkinson. “Incentive-based MARL Approach for Commons Dilemmas in Property-based Environments: Extended Abstract”. In Proceedings of the 23rd International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2024), May 2024.
62. \* M. A. C. Alves, E. S. Yourdshahi, A. Varma, **L. S. Marcolino**, J. Ueyama, P. Angelov. “On-Line Estimators for Ad-Hoc Task Execution: Learning Types and Parameters of Teammates for Effective

- Teamwork: JAAMAS Track”. In Proceedings of the 22nd International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2023), p. 140–142, May 2023.
63. \* 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.
  64. \* 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.
  65. S. A. Silva, S. R. Dias, **L. S. Marcolino**. “Bang: A System for Training and Visualization in Multi-agent Team Formation”. In Proceedings of the 16th International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2017), May 2017. (Demonstration)
  66. **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)
  67. \* 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)
  68. **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)
  69. **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).
  70. **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)
  71. 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)
  72. **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)
  73. **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)
  74. 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).
  75. **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, Portugal, May 2008, pages 1203-1206 (Short Paper).

#### Workshop Papers

76. \* W. De Souza Ramos, **L. S. Marcolino**, and E. R. Nascimento. “Text-driven Video Acceleration”. In the 37th Conference on Graphics, Patterns and Images (SIBGRAPI): Workshop of Theses and Dissertations (WTD), August 2024.

77. F. Meletti Rappa, R. Rodrigues-Filho, A. R. Panisson, **L. S. Marcolino**, L. Bittencourt. “Multi-armed Bandits for Self-distributing Stateful Services across Networking Infrastructures”. In the 3rd International Workshop on Intelligence Provisioning for Network and Service Management in Softwarized Networks, May 2024.
78. \* 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.
79. \* 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.
80. \* 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.
81. **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.
82. **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.
83. **L. S. Marcolino**, H. Xu, D. Gerber, B. Koley, 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.
84. 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.
85. **L. S. Marcolino**, D. Gerber, B. Koley, 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.
86. 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.
87. **L. S. Marcolino**, B. Koley, 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.
88. **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.
89. **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

90. **L. S. Marcolino**. “Three Fundamental Pillars of Decision-Centered Teamwork”, PhD Thesis, advised by M. Tambe. University of Southern California, March 2016.
91. **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.
92. **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.

#### Editorials

93. E. Andrejczuk, J. Alberola, **L. S. Marcolino**, P. Torroni. “Special issue of Teams in Multiagent Systems (TEAMAS): Preface”. In *Fundam Informaticae*, Vol. 174, No. 1, 12.05.2020, p. 61-62, May 2020.

#### News Media Articles

1. **L. S. Marcolino**. “Open-Air Tournament in Vietnam”. In the *European Go Journal*, November & December 2025.
2. **L. S. Marcolino**. “Free Book for Teaching Kids”. In the *European Go Journal*, September & October, 2024.
3. **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.

#### Literary Publications

1. **L. S. Marcolino**, “My First Book of Go Exercises”, 2024. Educational book for kids, published at Amazon. Available at: <https://github.com/sorianom/kids-go-books>.
2. **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.
3. **L. S. Marcolino**, “Vida” (“Life”), 2<sup>nd</sup> 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.
4. **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.
5. **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.

#### Successful Proposals

- “Dynamic Models for Real-Time Autonomous Decision Making Under Uncertainty in the Real World”, EPSRC & FAPESP collaborative grant, Principal Investigator. ~£1.2 million. Proposal passed Phase-I, Phase-II still in preparation. 2025.
- “Sustainability-Aware Federated Meta-Learning for Monitoring of Methan Emissions”, EPSRC & NSF collaborative grant, Co-Investigator. ~£400k (to UK). Proposal passed Phase-I, Phase-II still in preparation. 2025.

- “BrIAAna - Modelos e Algoritmos de Inteligência Artificial para Bioinformática no Desenvolvimento de Antimicrobianos (BrIAAna – Artificial Intelligence Models and Algorithms for Bioinformatics to Develop Antimicrobials)”. CNPQ, Brazil. External Co-Investigator. R\$430,000 (~£57k) January 2025~January 2027.
- “Research assistant in planetary ring simulation”, Lancaster University Careers Graduate Jobs Program. 12 weeks internship for a student. Co-coordinator. 2025.
- “Blockchain-Secured Metaverse for Human-AI Co-Learning”, FST Internal Catalyst Funding, Co-Investigator. £6k. 2024.
- “Prediction of clinical and economic outcomes using multimodal semantic representations of temporal drift-resilient patients”, FAPESP, FAPEMIG and UNIMED, Brazil, external Co-I. R\$805,564.56 (~£109k). 2023~2025.
- “BENDER: Algorithm for Predicting Active Biding Sites in Proteins”, CAPES Research Visit Grant, for Vinicius de Almeida Paiva. £12,890. 2024.
- “Implementing Intelligent Sensors and Machine Learning for Enhanced Iron Ore Processing: Applications and Analysis in the Mining Industry”, CAPES Research Visit Grant, for Saulo Neves Matos. £12,890. 2024.
- “Research assistant in planetary ring simulation”, Lancaster University Careers Graduate Jobs Program. 12 weeks internship for a student. Co-coordinator. 2024.
- “Great Challenges in Large Scale Multi-agent Systems”, CAPES/PRINT Research Visit, with UFMG, Brazil. R\$13,790 BRL (~£1.8k). 2023.
- “Great Challenges in Large Scale Real-time On-line Learning and Planning”, CAPES/PRINT Research Visit, with UFMG, Brazil. R\$13,790 BRL (~£1.8k). 2022.
- “Text-Driven Video Acceleration: A Weakly-Supervised Approach Using Vision-Language Modeling”, Microsoft PhD Fellowship Research Award, for Washington Luis de Souza Ramos. Co-supervisor. \$15,000 USD, 2021. (Only 45 students selected across the world)
- “Research assistant in planetary ring simulation”, Lancaster University Careers Graduate Jobs Program. 12 weeks internship for a student. Co-coordinator. 2020.
- “Personalizando Vídeos Acelerados Via Aprendizado por Reforço e Dados Multi-modais de Redes Sociais” (Personalising Accelerated Videos by Reinforcement Learning and Multi-modal Data Through Social Networks), CAPES/PRINT Research Visit, for Washington Luis de Souza Ramos, £9,640. 2019.
- “Algoritmo de otimização de formação de times a partir de dados psicométricos” (An Algorithm for Optimising Team Formation Using Psychometric Data), USP Agency for Innovation, Scholarship Program for International Exchange, for Luca Machado Bottino. ~£6k. 2019.
- “RingMind”, Arts Council National Lottery Project Grants, collaborator. £42,474. 2019.
- “Large Scale On-line Learning and On-line Planning in Real Time”, CAPES/PRINT Research Visit, with UFMG, Brazil. R\$13,790 BRL (~£1.8k). 2019.
- “Research assistant in artificial intelligence and planetary ring dynamics”, Lancaster University Careers Graduate Jobs Program. 12 weeks internship for a student. Coordinator. 2019.
- “Ad Hoc Teamwork”, SCC Undergraduate Research Associate (UGRA) studentship. Coordinator. Summer 2018.
- “Modelo de Times Ad-hoc para Agricultura de Precisão e Monitoramento de Pragas em Grandes Plantações” (Ad-hoc Teamwork Model for Precision Agriculture and Pest Monitoring in Big Plantations), FAPESP Studentship, for Matheus Aparecido do Carmo Alves. Co-supervisor. R\$9,183.24 BRL (~£1.2k). 2018.
- “Otimização da Formação Autônoma de Alianças Dinâmicas de Veículos Aéreos não Tripulados para Agricultura de Precisão” (Optimising Automatic Coalition Formation of UAVs for Precision Agriculture), USP Agency for Innovation, Scholarship Program for International Exchange, for Matheus Aparecido do Carmo Alves. ~£6k. 2018.

- “Development of Reinforcement Learning Models Applied to Smart Transportation Systems”, USP Agency for Innovation, Scholarship Program for International Exchange, for Caio Ferreira Bernardo. ~£6k. 2018.
- “Data Science of the Natural Environment”, EPSRC, member of research team. £2,656,400. 2018~2022.
- “Task Allocation and Learning in Teams of Unknown Robots”, FST Internal Research Grant. £2,500. November 2017 to March 2018.
- “Cooperative Localisation and Distributed Control of UAV Swarms”, Innovate UK, with DSTL. Principal Investigator. £75,845. January 2017 to June 2017.

### **Mentoring**

- I mentored the following students:
  - Haoran Peng, Spring 2024~Present  
PhD Student at Lancaster University
  - Ebtisaam Alharbi, Spring 2022~Present  
PhD Student at Lancaster University
  - Pankaj Goikar, Fall 2021~Present  
PhD Student at Lancaster University
  - Mohammad Alsomali, Fall 2020~Present  
PhD Student at Lancaster University
  - Mário Escarce Junior, Summer 2020~Spring 2025  
PhD Student at Lancaster University  
Summer 2015~Spring 2016  
Undergraduate Game Design student at Universidade Fumec, Brazil
  - Lukasz Pelcner, Spring 2020~Present  
PhD Student at Lancaster University  
Summer 2019~Fall2019  
Research Volunteer  
Spring 2018~Spring 2019  
Undergraduate Student at Lancaster University
  - Farid Bello, Fall 2018~Present  
PhD Student at Lancaster University
  - Matheus Aparecido Do Carmo Alves, Spring 2021~Summer 2024  
PhD Student at Lancaster University  
Fall 2018~Spring 2019  
Undergraduate Research Visitor from Universidade de São Paulo (USP)
  - Abdulrahman Kerim, Fall 2020~Summer 2024  
PhD Student at Lancaster University
  - Ronghui Mu, Spring 2020~Summer 2023  
PhD Student at Lancaster University
  - Washington Luis de Souza Ramos, Spring 2019~Fall 2023  
PhD student at Universidade Federal de Minas Gerais (UFMG)
  - Yuri Tavares Dos Passos, Fall 2019~Summer 2023  
PhD Student at Lancaster University
  - Elnaz Shafipour Yourdshahi, Fall 2016~Summer 2021  
PhD Student at Lancaster University
  - Vinícius De Almeida Paiva, Fall 2024~Present  
Visiting PhD Student from Universidade Federal de Viçosa (UFV)

- Saulo Neves Matos, Fall 2024~Present  
Visiting PhD Student from Universidade de São Paulo (USP)
- Gao Peng, Summer 2021~Summer 2022  
MSc Computer Science by Research student at Lancaster University
- Thiago Grabe, Spring 2020~Fall 2023  
Computer Science Masters student at Universidade Federal de Minas Gerais (UFMG)
- Marcelo Lemos, Spring 2021~Summer 2024  
Computer Science Masters student at Universidade Federal de Minas Gerais (UFMG)
- Matt Foot, Summer 2024  
MSc Data Science student at Lancaster University
- Martin Yii Chi Yang, Summer 2024  
MSc Data Science student at Lancaster University
- Gokul Nair, Summer 2023  
MSc Data Science student at Lancaster University
- Rares Craciunescu, Summer 2023  
MSc Data Science student at Lancaster University
- Ruyi Wang, Summer 2023  
MSc Data Science student at Lancaster University
- Chenqi Weng, Summer 2023  
MSc Data Science student at Lancaster University
- 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
- Edmund Moore, Summer 2018  
MSc Data Science student at Lancaster University
- Anaid Villamizar, Summer 2018  
MSc Data Science student at Lancaster University
- Shuxing Zhou, Summer 2018  
MSc Data Science student at Lancaster University
- Thomas Pinder, Summer 2018  
MSc Data Science 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
- Liang Xue, Fall 2021~Summer 2022  
MSc Computer Science student at Lancaster University
- Mei Lu, Fall 2020~Summer 2021  
MSc Computer Science student at Lancaster University
- Zach Tarbah, Fall 2017~Summer 2018  
MSc Computer Science student at Lancaster University
- Mohammed Patel, Fall 2023~Spring 2024  
MSci Computer Science student at Lancaster University
- Toby Mcaffery, Fall 2023~Spring 2024  
MSci Computer Science student at Lancaster University
- George Limbert, Fall 2022~Spring 2023  
MSci Computer Science student at Lancaster University
- Aaron Vijay Patel, Fall 2021~Spring 2022  
MSci Computer Science student at Lancaster University
- Cameron Clough, Fall 2021~Spring 2022  
MSci Computer Science student at Lancaster University
- Abdulrazak Bahrami, Spring 2021  
MSci Computer Science student at Lancaster University
- Advait Krishnan, Spring 2021  
MSci Computer Science student at Lancaster University
- Thomas McCracken, Spring 2018  
MSci Student at Lancaster University
- Andrew Blower, Spring 2017  
MSci Student at Lancaster University
- Daniel Farrell, Spring 2017  
MSci Student at Lancaster University
- Amokh Varma, Summer 2020~Winter 2023  
Undergraduate Research Volunteer (remote) from Indian Institute of Technology, Delhi.
- Luigi Lin, Summer 2020  
Undergraduate Research Volunteer from 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
- Gauri Dhawan, Winter 2017  
Undergraduate Research Visitor from the Vellore Institute of Technology, India.
- Theo Fraser, Fall 2023~Spring 2024  
Undergraduate Computer Science student at Lancaster University
- Benjamin Pilcher, Fall 2023~Spring 2024  
Undergraduate Computer Science student at Lancaster University
- Luxin Shao, Fall 2023~Spring 2024  
Undergraduate Computer Science student at Lancaster University
- Denver Whiteley, Fall 2023~Spring 2024  
Undergraduate Computer Science student at Lancaster University
- Mandy Yang, Fall 2023~Spring 2024  
Undergraduate Computer Science student at Lancaster University
- Kuba Wasilewski, Fall 2023~Spring 2024  
Undergraduate Computer Science student at Lancaster University
- Mitchell Jonathon, Fall 2022~Spring 2023  
Undergraduate Computer Science student at Lancaster University
- Teodor Candrea, Fall 2022~Spring 2023  
Undergraduate Computer Science student at Lancaster University
- Jack Ramshaw, Fall 2022~Spring 2023  
Undergraduate Computer Science student at Lancaster University
- Kier Palin, Fall 2022~Spring 2023  
Undergraduate Computer Science student at Lancaster University
- Edward Tompkinson, Fall 2022~Spring 2023  
Undergraduate Computer Science student at Lancaster University
- Zehang Yu, Fall 2022~Spring 2023  
Undergraduate Computer Science student at Lancaster University
- Killian Higgins, Fall 2021~Spring 2022  
Undergraduate Computer Science student at Lancaster University
- Tianran Wang, Fall 2021~Spring 2022  
Undergraduate Computer Science student at Lancaster University
- Jake Fenn, Fall 2021~Spring 2022  
Undergraduate Computer Science student at Lancaster University
- Bilal Hafeez, Fall 2021~Spring 2022  
Undergraduate Computer Science student at Lancaster University
- Harris Tariq, Fall 2021~Spring 2022  
Undergraduate Computer Science student at Lancaster University
- Ben Roselle, Fall 2021~Spring 2022  
Undergraduate Computer Science student at Lancaster University
- Tomas Ferreira Fernandes, Fall 2021~Spring 2022  
Undergraduate Computer Science student at 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
- Alex Collins, Fall 2017~Spring 2018  
Undergraduate Student at Lancaster University  
Spring 2019  
MSci Computer Science 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
- Saulo Antunes Silva, Fall 2016~Spring 2017  
CEFET-MG Undergraduate Student
- Rodrigo Novaes, Spring 2017  
CEFET-MG Undergraduate Student
- Aravind Srinivas Lakshminarayanan, Summer 2015~Spring 2016  
Undergraduate Electrical Engineer student at Indian Institute of Technology Madras, India
- Georgia Rossmann Martins, Summer 2015~Spring 2016  
Undergraduate 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

### **Teaching Mentoring**

- Mentor for Abdulrahman Kerim, in the Lancaster Associate Teacher Programme (ATP), Spring 2023~Summer 2023.

### **Reviewing**

- PC member for NeurIPS 2025
- PC member for RANLP 2025
- PC member for ICCV 2025
- PC member for ECAI 2025
- PC member for UAI 2025
- Area Chair for IJCAI 2025
- Senior PC member for AAMAS 2025
- PC member for CVPR 2025
- PC member for AAAI 2025
- PC member for AAAI 2025, Student Abstract Program
- Reviewer for Future Generation Computer Systems, 2024
- Reviewer for Neural Networks, 2024
- Reviewer for Pattern Recognition, 2024
- Reviewer for IEEE Robotics and Automation Letters, 2024
- PC member for UAI 2024
- PC member for PRIMA 2024
- PC member for LARS 2024
- PC member for IROS 2024
- PC member for IJCAI 2024
- PC member for ECAI 2024 – Demo Program
- PC member for ECAI 2024
- PC member for CVPR 2024
- PC member for AIIDE 2024
- PC member for AAMAS 2024 – Demo Program
- PC member for AAMAS 2024
- PC member for AAAI 2024
- PC member for AAAI 2024 – Student Program
- PC member for UAI 2023
- Technical reviewer for the book “Synthetic Data for Machine Learning”, Packt Publishing, 2023
- PC member for IJCAI 2023
- PC member for ECAI 2023
- PC member for AIIDE 2023
- Senior PC member for AAMAS 2023
- Reviewer for Artificial Intelligence Journal, 2022
- 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

### **Symposium Organization**

*Synthetic Data for Machine Learning*

November 2023

One day BMVA Technical Meeting

- Co-organiser, with Abdulrahman Kerim and Erickson Nascimento

### **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 panellist for roundtable “Classroom Strategies for Engaging International Students”, November 2022, Lancaster University.
- Invited panellist for AI roundtable, regarding Jinghan Zeng’s book launch: “Artificial Intelligence with Chinese Characteristics: National Strategy, Security and Authoritarian Governance”, Lancaster University, June 2022.
- 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)

- Zhaonian Zhang, Computer Science PhD, internal examiner, Lancaster University, 2024
- Abdurraheem Joomye, Computer Science Masters by Research, external examiner, Sunway University, 2025
- Khawaja Ahmed Umer, Computer Science Masters by Research, external examiner, Sunway University, 2024
- Ng Chung Hou, Computer Science Masters by Research, external examiner, Sunway University, 2024
- Stephen Daniel Mander, Computer Science PhD, internal examiner, Lancaster University, 2024
- Rubens de Oliveira Moraes Filho, Computer Science PhD, external examiner, Universidade Federal de Viçosa, 2024.
- Jordan Phillipson, Computer Science PhD, internal examiner, Lancaster University, 2023
- Bibi Aamirah, Computer Science Masters by Research, external examiner, Sunway University, 2023
- Kenny Tan Yi Shin, Computer Science Masters by Research, external examiner, Sunway University, 2023
- Liew Jia Jun, Computer Science Masters by Research, external examiner, Sunway University, 2023
- Renato Fernando dos Santos, Computer Science PhD thesis, external examiner, Universidade Federal de Minas Gerais, 2023
- Alexander Wild, Computer Science PhD thesis, internal examiner, Lancaster University, 2022
- Kouros 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 Mascal, 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 Abdulsadig, 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 Valev, 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 ~ Present  
Lancaster University
- SCC 461 – Programming for Data Scientists. Teaching Python programming. (Fall 2016 ~ Spring 2024)
  - SCC 462 – Distributed Artificial Intelligence. (Fall 2016 ~ Spring 2024)
  - SCC 411 – Building Big Data Systems (Spring 2024)
  - SCC 403 – Data Mining. (Fall 2017 ~ Winter 2019)
  - Stand-alone classes:
    - Welcome Week, Introduction to Python Programming. (October 2019 ~ October 2023)
    - MSc Data Science, Dissertation Writing Session (May 2022 ~ July 2024).

- 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* September 2021~September 2024  
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  
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:

- ‘Life in a planetary ring’, part of Campus in the City 2024, Lancaster City Library, Lancaster, UK, April 2024.
- 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>)

*Lancaster Go Club Co-Organiser* October 2021 ~ Present  
 • Co-organising activities to promote and teach the strategy board game Go in the city of Lancaster.

*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~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 ~ Present  
 Lancaster University  
 • Organiser of seminars about Artificial Intelligence and Machine Learning, and discussion groups about Mathematics.

*CNPQ Technological Development Scholarship* February 2005~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 talks at the Universidade Federal de Viçosa (UFV), July 2025  
 Presented the work: “It Is Among Us: Identifying Adversaries in Ad-hoc Domains Using Q-valued Bayesian Estimations”  
 Presented the talk: “My Trajectory – Autonomous Agents and Multi-agent Systems”
- Invited talk at the N8 Machine Learning Community Day, Lancaster University, March 2024  
 Presented the Work “It Is Among Us: Identifying Adversaries in Ad-hoc Domains Using Q-valued Bayesian Estimations”
- Invited talk at the Computational Statistics and Machine Learning seminar series, Lancaster University, March 2024  
 Presented the Work “It Is Among Us: Identifying Adversaries in Ad-hoc Domains Using Q-valued Bayesian Estimations”
- Invited talk at University for the Creative Arts - Farnham, November 2023  
 Presented the Work “Dynamic Music Generation in Games: A Human-Machine Collaboration Perspective”

- Invited talk at Universidade Federal de Minas Gerais (UFMG), September 2023  
Presented the Work “Certified Policy Smoothing for Cooperative Multi-Agent Reinforcement Learning”
- Invited class at Universidade Federal de Minas Gerais (UFMG), September 2023  
Presented about Monte Carlo Tree Search
- Invited talk at Centro Federal de Educação Tecnológica de Minas Gerais (CEFET-MG), August 2022  
Presented the work “On the Throughput of the Common Target Area for Robotic Swarm Strategies”
- 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), On-line, 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**

- Portuguese: Native
- English: Fluent
- 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