

ANNA GAUTIER

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EDUCATION

- University of Oxford in Oxford, UK** *October 2018 – July 2023*
Doctor of Philosophy
on “Resource Allocation for Constrained Multi-Agent Systems”
supervised by Professor Nick Hawes and Professor Michael Wooldridge
- London School of Economics and Political Science in London, UK** *October 2017 – August 2018*
Master of Science
on “Fair Allocation with Posted Price Mechanisms”
supervised by Paul Dütting
winner of the Haya Freedman Prize for Best Dissertation
- Washington University in St. Louis, MO, USA** *August 2013 – June 2017*
Bachelor of Science cum laude
in Computer Science
- Washington University in St. Louis, MO, USA** *August 2013 – June 2017*
Bachelor of Arts cum laude
in Mathematics, with minor in Physics

EMPLOYMENT

- KTH Royal Institute of Technology Stockholm**
Postdoctoral Researcher *June 2023 – Present*
working with Jana Tumova
Digital Futures Postdoctoral Fellowship on “Designing Rules for Multi-Robot Systems”

RESEARCH PROJECTS

- Digital Future Postdoctoral Fellowship**
Designing Rules for Multi-Robot Systems.
Principle Investigator; awarded 2 million SEK (~\$200 thousand).
- WASP-NEST Project**
Perceiving and Communicating Correct-by-Design Sociably Acceptable Autonomous Systems.
Affiliated Researcher leading work package “Socially Acceptable Decision Making and Acting”

HONORS AND AWARDS

- AWS Studentship in collaboration with the Oxford-Singapore Human Machine Collaboration initiative
- EPSRC CDT Studentship in Autonomous Intelligent Machines and Systems
- Haya Freedman Prize for Best Dissertation in Applicable Maths at London School of Economics
- ARTU (Advanced Research Training for Undergraduates) Research Scholar
- Highest Distinction in Mathematics at Washington University

SUPERVISION, TEACHING AND TALKS

PhD Student Supervision:

- Rebecka Winqvist (since 2023)

Master’s Student Supervision:

- Tommaso Piehl (2024), Laura Georgescu (2022-2023), Alex Stephens (2021)

Selected Invited Talks:

- Chalmers Institute of Technology, Formal Methods Unit, December 2023. “Safe resource allocation for multi-agent systems”
- KTH, Royal Institute of Technology, Division of Robotics, Perception, and Learning. December 2022. “Resource allocation for constrained multi-agent systems”

- University of Oxford, AIMS CDT Annual Meeting, October 2019. “Non-cooperative multi-agent pathfinding.”

Selected Teaching:

- Guest Lecturer in “Safe Robot Planning and Control” (KTH 2023)
- Organizer of “Introduction to Robotics” (Oxford 2019)
- TA for “Computational Game Theory” and “Machine Learning” (Oxford 2019-2022)
- TA for “Multi-Agent Systems” and “Computer Science, Logic and Discrete Math (WUSTL 2016-2017)

ACADEMIC SERVICE

Committee Membership

- Robotics Perception and Learning Summer School Organizing Committee (KTH 2023-2024)
- Wolfson College Academic Committee (Oxford 2019-2021)
- Student Staff Liaison Committee (LSE 2017-2018)

Program Committee Member at: AAAI 2024, AAMAS 2024, AAAI 2023, AAAI 2023

Reviewer for: RSS 2024, AIJ Special Issue 2023, AAMAS 2022

Sub-reviewer at: AAAI; ICRA; AAMAS; IJCAI; RSS; TAC; NeurIPS; ECMR; KR

REFERENCES

On request.

BIOGRAPHICAL INFORMATION

Gender: Female. Nationality/Citizenship: USA. Current residency: Sweden.

Languages: English, Native. Swedish, A2.

PUBLICATIONS

1. Alexis Linard*, **Anna Gautier***, Daniel Duberg, Jana Tumova. 2024. Robust MITL Planning Under Uncertain Navigation Times. In Proceedings of the 2024 International Conference on Robotics and Automation (ICRA 2024), IEEE. *In press.* (**44.8% acceptance rate**).
2. Clarissa Costen, **Anna Gautier**, Bruno Lacerda, Nick Hawes. 2024. Multi-Robot Allocation of Assistance from a Shared Uncertain Operator. In Proceedings of the 23rd International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2024), IFAAMAS. *In press.* (**25% acceptance rate**).
3. **Anna Gautier**. Resource Allocation for Constrained Multi-Agent Systems. 2023. [DPhil (PhD) thesis, University of Oxford].
4. **Anna Gautier**, Marc Rigter, Bruno Lacerda, Nick Hawes, and Mike Wooldridge. 2023. Risk-Constrained Planning for Multi-Agent Systems with Shared Resources. In Proceedings of the 22nd International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2023), IFAAMAS. (**23.3% acceptance rate**).
5. **Anna Gautier**, Bruno Lacerda, Nick Hawes, and Mike Wooldridge. Multi-Unit Auctions for Allocating Chance-Constrained Resources. 2023. In Proceedings of the 37th AAAI Conference on Artificial Intelligence (AAAI 2023), AI Press. (**19.6% acceptance rate**).
6. **Anna Gautier**, Alex Stephens, Bruno Lacerda, Nick Hawes, and Mike Wooldridge. 2022. Negotiated Path Planning for Non-Cooperative Multi-Robot systems. In Proceedings of the 21st International Conference on Autonomous Agents and Multiagent Systems, (AAMAS 2022), IFAAMAS. (**26% acceptance rate**).
7. **Anna Gautier**. 2022. Non-Cooperative Multi-Robot Planning Under Shared Resources, Doctoral Consortium Extended Abstract. In Proc. of the 21st International Conference on Autonomous Agents and Multiagent Systems (AAMAS 2022), IFAAMAS.
8. Bruno Lacerda, **Anna Gautier**, Alex Rutherford, Alex Stephens, Charlie Street, Nick Hawes. 2022. Decision-making Under Uncertainty for Multi-Robot Systems. *AI Communications*. 35, 4 (2022), 433-411.
9. **Anna Gautier**, Bruno Lacerda, Nick Hawes, and Mike Wooldridge. 2020. Negotiated Path Planning for Non-Cooperative Multi-Robot Systems. In Proceedings of the IJCAI-2020 Workshop on Multi-Agent Path Finding.
10. **Anna Gautier** and Michael Wooldridge. 2022. Mechanism Design in the Real World: The VCG Mechanism. *IEEE Intelligent Systems & Their Applications*.
11. (*denotes joint first authors)