ANNA GAUTIER

annagau@kth.se ● Stockholm, Sweden

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.*

(*denotes joint first authors)