JESSICA WOODGATE

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 Bristol, UK   07548166774

Computer Science Ph.D. student at the University of Bristol. Passionate about the impact of technology on society, research interests lie in the domain of AI ethics and multi-agent systems, specifically applying normative ethics principles to decision-making in sociotechnical systems (STS).

EDUCATION

University of Bristol, UK *November 2022 – February 2027*
Ph.D. in Computer Science

University of Bristol, UK *September 2020 – January 2022*
M.Sc. Computer Science (Conversion): Distinction

University of Sheffield, UK *September 2015 – July 2018*
B.A. (Hons) Philosophy: Upper Second-Class Honours 68.5%

ACADEMIC PROJECTS (ALL AVAILABLE ON GITHUB)

Developer, RAWL·E *February 2025*

- Built a codebase facilitating the creation of agents that promote ethical norms by operationalising Rawlsian ethics to balance societal well-being with individual goals

- Evaluations in simulated harvesting scenarios comparing societies of RAWL·Eagents with societies of agents that do not implement Rawlsian ethics

SCRUM Leader, Database Lead, Back-End Co-Developer, Left Unread (Module: Software Engineering and Group Project) *February 2021 – May 2021*

- SCRUM team leader ensuring regular effective meetings, sprint goals set and met, all team members were supported, user impact was addressed, and ethical framework was adhered to

- Led database development and co-developed back-end development including building the API, and ensuring other back-end developers stayed on track

Developer, STAG (Module: Object-Oriented Programming with Java) *June 2021*

- Constructed a general-purpose socket-server game-engine for text adventure games in Java

Developer, DB (Module: Object-Oriented Programming with Java) *March 2021*

- Assembled a relational database server from scratch in Java

PROFESSIONAL SERVICE

Organiser, Protecting the Earth with Autonomous Systems (PROTEAS) *November 2024 – ongoing*

Help with organising workshops, project supervision, and investigating sustainability considerations in education

Organiser, Citizen-Centric AI Systems (CCAIS) Seminars *July 2023 – ongoing*

Facilitate seminars including moderating sessions, liaising with speakers, and website maintenance

Organiser, Data Ethics Club *January 2023 – ongoing*

Moderate seminars and author blog posts summarising reading related to data ethics and seminar discussions

PC Member, C-MAS workshop, AAMAS *March 2025*

PC Member, C-MAS workshop, AAMAS *March 2024*

Consultant, AI Ethics for Journalists, The Thompson Foundation *April 2023*

Advised development of course on AI ethics for journalists. Provided critical feedback on course content and structure.

PC Member, AAMAS Blue Sky Track *December 2022*

Student Volunteer, IJCAI *August 2022*

ACADEMIC EXPERIENCE

University of Bristol, UK *June 2025 – September 2025*
Summer Project Co-Supervisor

Robotics M.Sc. Summer Project

University of Bristol, UK *September 2022 – December 2022*
Teaching Assistant

Introduction to Computer Science, Computer Science (Conversion) M.Sc.

University of Bristol, UK *January 2022 – November 2022*
Research Assistant

Published a Blue Sky paper from the findings of M.Sc. dissertation suggesting research directions for the application of normative ethical principles to multiple user social dilemmas

University of Bristol, UK *September 2020 – January 2022*
M.Sc. Computer Science (Conversion)

Conducted a critical analysis of normative ethics in computer science and application to multiple-user social dilemmas

PUBLICATIONS

Jessica Woodgate. *Ethical Decision-Making in Multi-Agent Systems*. (Accepted/In press). Proc. of 24th International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS), 2025, p. 1-3.

Jessica Woodgate and Nirav Ajmeri. *Combining Normative Ethics Principles to Learn Prosocial Behaviour*. (Accepted/In press). Proc. of 24th International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS), 2025, p. 1-3.

Jessica Woodgate, Paul Marshall, and Nirav Ajmeri. *Operationalising Rawlsian Ethics for Fairness in Norm-Learning Agents*. (Accepted/In press). Proc. of 39th Annual AAAI Conference on Artificial Intelligence (AAAI), 2025, p. 1-9.

Jessica Woodgate and Nirav Ajmeri. *Macro Ethics Principles for Responsible AI Systems: Taxonomy and Future Directions*. ACM Computing Surveys (CSUR), 2024, pages 1-39.

Jessica Woodgate. *Ethical Principles for Reasoning about Value Preferences*. Proc. of 6th International Conference on Artificial Intelligence, Ethics and Society (AIES), Student Track, Montreal, 2023, pages 972-974.

Jessica Woodgate and Nirav Ajmeri. *Macro Ethics for Governing Equitable Sociotechnical Systems*. Proc. of 21st International Conference on Autonomous Agents and Multiagent Systems (AAMAS), Blue Sky Idea Track, Auckland, 2022, pages 1824-1828.

ACADEMIC PRESENTATIONS

Invited Talks

· January 2025. Generated Science: How AI is Impacting Academic Publishing. Copenhagen University Library, Online.
· November 2024. Generated Science: How AI is Impacting Academic Publishing. Knowledge Exchange Expert Meeting. Jisc, Bristol.

Conference Papers

· February 2025. Operationalising Rawlsian Ethics for Fairness in Norm-Learning Agents. 39th Annual AAAI Conference on Artificial Intelligence (AAAI). Philadelphia.
· August 2023. Ethical Principles for Reasoning about Value Preferences. 6th International Conference on Artificial Intelligence, Ethics and Society (AIES), Student Track. Montreal.
· May 2022. Macro Ethics for Governing Equitable Sociotechnical Systems. 21st International Conference on Autonomous Agents and Multiagent Systems (AAMAS), Blue Sky Idea Track. Auckland, Online.

AWARDS

Funding to attend AAAI *February 2025*

• Awarded 1200 USD from AAAI to participate and present at AAAI annual conference

Funding to attend AIES *August 2025*

• Awarded 1300 USD from AIES and 750 GBP from Society for Applied Philosophy to participate and present at AIES