GRETA WARREN

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EMPLOYMENT

Postdoctoral Researcher, Department of Computer Science, University of Copenhagen, Denmark Mar 2024 - Present

- Member of Copenhagen Natural Language Understanding research group and ExplainYourself project team (funded by European Research Council) researching human-centred explanations for automated fact-checking
- Conducting interdisciplinary HCI and NLP research using qualitative and quantitative methods to understand and address diverse stakeholder needs for explainable AI
- Collaborating with a multi-disciplinary team with expertise in natural language processing, human-computer interaction, and key stakeholders (e.g., fact-checkers and journalists)
- Advisors: Prof. Isabelle Augenstein (PI) and Prof. Irina Shklovski

Research Assistant, Trinity College Institute of Neuroscience, Trinity College Dublin, Ireland Sep 2018 - Aug 2019

- Recruited participants and collected electroencephalography (EEG), pupillometric and neuropsychological data, conducted data entry, processing and analysis, compiled hospital research ethics applications
- Delivered talk on brain injury research to patients and staff in National Rehabilitation Hospital, Dublin

EDUCATION

Ph.D., School of Computer Science, University College Dublin, Ireland Sep 2019 - Jan 2024

- Dissertation: *User-centred counterfactual explanations for explainable AI*
- Supervisors: Prof. Mark Keane and Prof. Ruth Byrne
- Awarded multiple travel scholarships (€6000+; ACM SIGCHI, ACM FAccT, ICCBR)
- Collaborated with Accenture Labs, The Dock, Dublin on applied explainable AI projects (2022 - 2023)

B.A. (Hons), Psychology, Trinity College Dublin, University of Dublin, Ireland Sep 2014 - May 2018

- Dissertation: *Effects of additive and subtractive counterfactual thinking on choice of political candidate*
- Supervisor: Prof. Ruth Byrne

TEACHING EXPERIENCE

Teaching Assistant, School of Computer Science, University College Dublin Dublin, Ireland Sep 2020 - April 2022

- 2020-2022 Text Analytics, MSc course, coordinated demonstrators and administration, prepared lab materials, facilitated lab sessions and graded assignments
- 2021-2022 Data Science in Python, MSc course, prepared lab materials and facilitated lab sessions
- 2020-2022 Introduction to Programming, BSc course, prepared lab materials, facilitated lab sessions and graded assignments
- 2020-2021 Programming I & Object-Oriented Programming, MSc course, prepared lab materials, facilitated lab sessions and graded assignments

SKILLS

Research Design: Designing and conducting large-scale human behavioural experiments. Extensive experience with Prolific Academic, Alchemer, Survey Monkey and Qualtrics.

Software: Python, R, LaTeX, HTML, SPSS, G*power.

Explainable AI: Implementing and comparative evaluation of explainable AI methods in computational experiments.

Science Communication: Disseminating research methodology and results at high-impact international conferences. Communicating psychological and technical research findings to industry audiences and the general public.

AWARDS & SCHOLARSHIPS

Gary Marsden Travel Award, ACM SIGCHI	€4,000 Mar 2023
Doctoral Consortium Scholarship, ICCBR 2022	€500 Sep 2022
Travel Award, ACM FAccT 2022	€1,500 Jun 2022
1st Prize, Arthur Cox Alternative Perspectives Essay Competition, Trinity College Law Review	May 2018
First Class Award, Trinity College Dublin	Sep 2015
Entrance Exhibition, Trinity College Dublin	€150 Sep 2014
All Ireland Scholarship, JP McManus Trust (4 year scholarship)	€6,750 p.a. Sep 2014

PROFESSIONAL SERVICE

Reviewer / Programme Committee Member

ACM CHI Conference on Human Factors in Computing Systems	2025
Annual Meeting of the Cognitive Science Society (CogSci)	2024, 2025
ACM Conference on Intelligent User Interfaces (IUI) – Poster and Demo Track	2023, 2024, 2025
AAAI/ACM Conference on Artificial Intelligence, Ethics, and Society (AIES)	2022, 2023, 2024
Workshop on Explainable AI at International Joint Conference on Artificial Intelligence (XAI @ IJCAI)	2023, 2024
Workshop on Cognitive Aspects of Knowledge Representation at Knowledge Representation (CAKR @ KR)	2023
Irish Conference on Artificial Intelligence and Cognitive Science (AICS)	2021

Journal Reviewing

Philosophy & Technology	2024
Decision Support Systems	2023
Expert Systems	2022

PUBLICATIONS

Conference Proceedings

- **Greta Warren**, Irina Shklovski, and Isabelle Augenstein. Show me the work: Fact-checkers' requirements for explainable automated fact-checking. In *Proceedings of the CHI Conference on Human Factors in Computing Systems*, CHI '25, New York, NY, USA, 2025. Association for Computing Machinery. doi:10.48550/arXiv.2502.09083

- **Greta Warren**, Eoin Delaney, Christophe Guéret, and Mark T. Keane. Explaining multiple instances counterfactually: User tests of group-counterfactuals for XAI. In Juan A. Recio-Garcia, Mauricio G. Orozco-del Castillo, and Derek Bridge, editors, *Case-Based Reasoning Research and Development*, pages 206–222, Cham, 2024. Springer Nature Switzerland. doi:10.1007/978-3-031-63646-2_14

- **Greta Warren**, Ruth M. J. Byrne, and Mark T. Keane. Categorical and continuous features in counterfactual explanations of AI systems. In *Proceedings of the 28th International Conference on Intelligent User Interfaces*, IUI '23, pages 171–187, New York, NY, USA, 2023. Association for Computing Machinery. doi:10.1145/3581641.3584090

- **Greta Warren**, Barry Smyth, and Mark T. Keane. Better counterfactuals, ones people can understand: Psychologically-plausible case-based counterfactuals using categorical features for explainable AI (XAI). In Mark T. Keane and Nirmalie Wiratunga, editors, *Case-Based Reasoning Research and Development: 30th International Conference, ICCBR 2022, Nancy, France, September 12–15, 2022, Proceedings*, pages 63–78, Berlin, Heidelberg, 2022. Springer-Verlag. doi:10.1007/978-3-031-14923-8_5

Journal Articles

- **Greta Warren**, Ruth M. J. Byrne, and Mark T. Keane. Categorical and continuous features in counterfactual explanations of AI systems. *ACM Trans. Interact. Intell. Syst.*, 14(4), December 2024. doi:10.1145/3673907

- Catherine N. Moran, David P. McGovern, **Greta Warren**, Rónán Ó Grálaigh, Joanne P. M. Kenney, Alan Smeaton, and Paul M. Dockree. Young and restless, old and focused: Age-differences in mind-wandering frequency and phenomenology. *Psychology and aging*, 36(2):252, 2021. doi:10.1037/pag0000526

Workshops and Symposia

- **Greta Warren**, Mark T. Keane, Christophe Gueret, and Eoin Delaney. Explaining groups of instances counterfactually for XAI: A use case, algorithm and user study for group-counterfactuals. *IJCAI-23 Workshop on Explainable Artificial Intelligence (XAI)*, 2023. doi:10.48550/arXiv.2303.09297

- **Greta Warren**, Mark T. Keane, and Ruth M. J. Byrne. Features of explainability: How users understand counterfactual and causal explanations for categorical and continuous features in XAI. In *IJCAI-ECAI'22 Workshop: Cognitive Aspects of Knowledge Representation*, 2022. doi:10.48550/arXiv.2204.10152

- Jörg Cassens, Lorenz Habenicht, Julian Blohm, Rebekah Wegener, Joanna Korman, Sangeet Khemlani, Giorgio Gronchi, Ruth M. J. Byrne, **Greta Warren**, Molly S. Quinn, and Mark T. Keane. Explanation in human thinking. In *Proceedings of the 43rd Annual Meeting of the Cognitive Science Society*, 2021. URL: https://escholarship.org/content/qt9k6291nk/qt9k6291nk.pdf

Preprints

- Nadav Borenstein, **Greta Warren**, Desmond Elliott, and Isabelle Augenstein. Can community notes replace professional fact-checkers?, 2025. URL: https://arxiv.org/abs/2502.14132, arXiv:2502.14132

Invited Talks

- **Greta Warren** (December, 2022). Simplicity and complexity in explanations of diagnoses and predictions. *Reasoning and Imagination Lab, Trinity College Dublin.*
- **Greta Warren** and Eoin Delaney (November, 2022). Group counterfactual explanations for AI predictions. *Accenture Labs at The Dock, Dublin.*
- **Greta Warren** (November, 2021). Counterfactual and causal explanations in eXplainable AI (XAI). *Reasoning and Imagination Lab, Trinity College Dublin.*