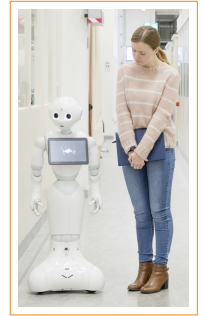# Katie Winkle
Curriculum Vitae

Uppsala Social Robotics Laboratory
Department of Information Technology
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✉ katie.winkle@it.uu.se

Mission: *Delivering ethical and effective Human-Robot Interaction (HRI) for the real-world.*
Research Interests: (Social) Human-Robot Interaction; Robots in Society; Ethical Robotics

Employment

Feb 2022 - **Assistant Professor (Biträdande Universitetslektor) in Social Robotics**,
Division of Vi3; Human-Machine Interaction
Department of Information Technology
Uppsala Universitet, Uppsala, Sweden.

2020 - 2022 **Digital Futures Postdoctoral Research Fellow**, *Individual Fellowship (100% Research)*,
Social Robotics Group
Division of Robotics, Perception and Learning
KTH Royal Institute of Technology, Stockholm, Sweden.

2019 - 2020 **Research Associate**, *ROBOTIPS Project*,
Bristol Robotics Laboratory
University Of the West of England, Bristol, UK.

University Leadership Roles

Apr 2023 - **Equal Opportunities Officer (Lika Villkorsombud)**, *Department of Information Technology*.

Nov 2022 - **Executive Committee (Programberedningen)**, *Uppsala University Psychosocial Care Programme (U-CARE)*, representing computer science and care (datavetenskap och vård).

Education

Sep 2020 **PhD in Robotics**, *Bristol Robotics Laboratory*,
FARSCOPE Centre for Doctoral Training
University of Bristol and University of the West of England, Bristol UK
Thesis Title: *Expert-Informed Design and Automation of Persuasive, Socially Assistive Robots*
Awarded unconditionally (no corrections required).

Jun 2015 **MEng in Mechanical Engineering**, *University of Bristol*, Bristol, UK,
awarded with First Class Honours.

Funding

2023 - **Creating Robots For Children, With Children**, *Principal Investigator*, Jacobs Foundation Research Fellowship CHF 165,000 (SEK 1,800,000).

2022 - **Co-Designing a Social Robot Facilitator to Boost Community Engagement with Type 2 Diabetes Prevention**, *Principal Investigator*, with Meena Daivadanam and Louise von Essen Funded by the Uppsala Diabetes Center: SEK 1,600,000.

2020 - 2022 **Digital Futures Postdoctoral Fellowship**, *Principal Investigator*,
Funded by the Digital Futures Research Centre at KTH: SEK 2,000,000.

Honors and Awards

2023 Community Service Award
For outstanding contribution and support in organisation of the 2023 ACM/IEEE International Conference on Human-Robot Interaction

2023 Best Paper Award: Theory and Methods
ACM/IEEE International Conference on Human-Robot Interaction, Stockholm, Sweden

2021 Top 3 Finalist: Best UK PhD in Robotics Award
Awarded 3rd Place in Queen Mary University of London National Competition

2020 Best Paper Award
International Conference on Robot Ethics and Standards

2019 HRI Pioneer
Selected to participate in Human-Robot Interaction (HRI) Pioneers, a highly selective workshop to foster creativity, communication and collaboration between young researchers.

2018 Best Paper Award: Theory and Methods
ACM/IEEE International Conference on Human-Robot Interaction, Chicago, USA

2018 M H Joseph Prize for Academic Excellence
British Federation of Women Graduates

2016 Undergraduate Visionary Award
Institution of Mechanical Engineers

Supervision

Postdoctoral Researchers
from 10/2023 **Ana Tanevska**, *Uppsala University*,
Postdoctoral Researcher on the SymAware Project.

PhD Students
I am main supervisor for the following student(s):
from 08/2022 **Lux Miranda**, PhD in Computer Science with Specialisation in Human-Computer Interaction, Uppsala University, *Co-supervisor: Ginevra Castellano*.

from 09/2022 **Alessio Galatolo**, PhD in Computer Science with Specialisation in Human-Computer Interaction, Uppsala University, *Co-supervisor(s): Meena Daivadanam, Jessica Lindblom, Louise Von Essen*.

I am co-supervisor for the following student(s):
from 04/2022 **Laetitia Tanqueray**, PhD in Technology and Society, Lunds Tekniska Högskola, *Main Supervisor: Stefan Larsson*.

I have also provided supervision on collaborative research visits by the following students:
Autumn 22 **Terran Mott**, PhD in Robotics, Colorado School of Mines, *Main Supervisor: Tom Williams*.

Spring 22 **Laura Moradbakhti**, PhD in Psychology and Human-Machine Interaction, Linz Institute of Technology, *Main Supervisor: Martina Mara*.

Summer 21 **Giulia Belgiovine**, PhD in Robotics Brain and Cognitive Sciences, Istituto Italiano di Tecnologia, *Main Supervisor: Alessandra Sciutti*.

MSc Students
Recent projects supervised at the 2nd cycle level:
2021 Alessio Galatolo *'Exploring and Incorporating Personality, Social Identity and (In)Congruent Emotions into Robots'*
Degree Project in Computer Science and Engineering, 30 credits, KTH

2020 Ravi Bir *'Implementing Machine Learning Techniques to Improve the Performance of Socially Assistive Robots'*
Degree Project in Computer Science and Engineering, 30 credits, KTH

2019 Ranvir Bhogal *'Defining a Social Robot in a Public Environment'*
MSc Robotics Dissertation, 60 credits (30 ECTS equiv.), Bristol Robotics Laboratory

▬▬▬▬ Teaching

Experience in Full Course Delivery:

Spring 2023 1MD300 Advanced Interaction Design *Uppsala University* (5 credits; 2nd cycle)
Role: Co-Teacher
Activities: Lectures, seminars and design workshop sessions
Extent: Responsible for re-design and assessment of one assignment, supporting all (and leading some) seminar discussions, revising seminar reading materials and assessing student submissions
Topics: gamification, behaviour change theory and ethics in interaction design
Number of students: 51

Spring 2023 1MD300 Social Robotics *Uppsala University* (7.5 credits; 2nd cycle)
Role: Lecturer, Course Responsible
Activities: Lectures and laboratory sessions
Extent: Responsible for 50% of the course lectures, design and assessment of assignments
Topics: verbal, non-verbal and emotions in human-robot interaction, ethics and social impact
Number of students: 10

Autumn 2021 DD2413 Social Robotics *KTH Royal Institute of Technology* (7.5 credits; 2nd cycle)
Role: Lecturer, Course Responsible
Activities: Lectures, laboratory sessions and tutorials
Extent: Responsible for 50% of the course lectures (covering technical and ethical aspects of social human robot interaction), group project supervision, development of teaching materials and course assessment
Topics: design methods, perception, technical implementation of robot architectures, social (machine) learning, ethics
Number of students: approx. 20

2017 - 2018 COMSM4111 Robotic Systems *University of Bristol* (10 credits equiv.; 1st cycle)
COMSM0012 Robotic Systems PG *University of Bristol* (10 credits equiv.; 2nd cycle)
Role: Lecturer, Course Responsible and Examiner
Activities: lectures and laboratory sessions
Extent: As a lecturer delivering approx. 12 lectures and supervising 18 hours of laboratory sessions over the 12 week academic term, as course responsible recruiting, training and co-ordinating the course TA's, communicating with students, developing the course assessment, grading and analysing student evaluations
Topics: stochastic filtering, uncertainty modelling, SLAM, mobile robotics, social robotics
Number of students: approx. 100

Additional Teaching Experience:

Autumn 2022 1MD016 Human-Computer Interaction *Uppsala University* (5 credits; 1st cycle)
Role: Teaching Assistant
Extent: managing arrangements for this fully distance/asynchronous course, providing feedback and grading on student submissions, responding to student questions.
Number of students: 104

Spring 2021 DT2140 Multimodal Interaction and Interfaces *KTH Royal Institute of Technology* (7.5 credits; 2nd cycle)
Role: Project Supervisor
Extent: I supervised a student-led group research project which resulted in a poster publication at the Persuasive Technology Conference 2021.

Spring 2021	DD3316 Robotics Reading Group *KTH Royal Institute of Technology* (6 credits; 3rd cycle)

Spring 2021   DD3316 Robotics Reading Group *KTH Royal Institute of Technology* (6 credits; 3rd cycle)
Role: Student Mentor
Extent: Participation in a paper reviewing session with two PhD students, providing an exemplar review and giving feedback on their reviews.

2020, 2021   DD2380 Artificial Intelligence *KTH Royal Institute of Technology* (6 credits; 2nd cycle)
Role: Lecturer
Extent: Guest lecture on AI ethics
Number of students: 116

2017-2018   AENGM0029 Robotics Research Preparation *University of Bristol* (7.5 credits equiv.; 2nd cycle)
Role: Teaching Assistant
Extent: Leading weekly reading group sessions and assessing student presentations (providing both formative and summative assessment) over the 12 week term
Number of students: approx. 20

2016-2017   EMATM0029 Bio-Inspired Artificial Intelligence *University of Bristol* (5 credits equiv.; 2nd cycle)
Role: Teaching Assistant
Extent: Providing online forum assistance with exercise sheets; expert solution preparation
Topics: artificial evolution, neural networks, swarm intelligence, and bio-inspired robotics
Number of students: approx. 80

2016-2017   EMAT10007 Introduction to Computer Programming *University of Bristol* (5 credits equiv.; 1st cycle)
Role: Teaching Assistant
Extent: Supporting weekly 3 hour laboratory sessions over the 12 week term; standardisation of project marking scheme and assessment of final student projects
Topics: SCRATCH, python, programming
Number of students: approx. 50

2015-2017   COMSM4111 Robotic Systems *University of Bristol* (10 credits equiv.; 1st cycle)
COMSM0012 Robotic Systems PG *University of Bristol* (10 credits equiv.; 2nd cycle)
Role: Teaching Assistant
Activities: lectures and laboratory sessions
Extent: Supporting weekly 3 hour laboratory sessions over the 12 week term; assessment of final student projects
Topics: stochastic filtering, uncertainty modelling, SLAM, mobile robotics, personal robotics
Number of students: approx. 100

Selected Invited Talks

Mar 2023	Tema Genus Seminar Series *Linköping University, Sweden*
Dec 2022	Tutorial on Participatory Design: HRI Winterschool on Embodied AI *Ghent, Belgium*
Nov 2022	Keynote Speaker: INTERACT! Workshop, Ruhr-Universität, *Bochum, Germany*
Jun 2022	Keynote Speaker: KTH RPL International Summer School, *Bro, Sweden*
May 2022	Plenary Speaker: International Symposium on Use of Humanoid Robot Technology for Therapy, *Greifswald, Germany*
Apr 2022	Children and AI Workshop, Cambridge University, *Digital Event*
Feb 2022	Responsible AI Seminar, Umeå University, *Digital Event*
Jun 2021	HEART Webinar, Softbank Robotics, *Digital Event*
Apr 2021	Keynote Speaker: Social BRIDGES e-conference, *Digital Event*
Jun 2020	Heriot-Watt University, *Digital Event*
Jan 2020	Colorado School of Mines, *Colorado, USA*

Additional Professional Development

2022 - 2024	Cultural Competence in Computing 3C's Fellow Program *Duke University*
2022 - 2023	TekNat Mentorship Program *Uppsala University*
Autumn 2022	Swedish for Academics 2 *Uppsala University*
2020 - 2022	Swedish A1 and A2 *KTH Royal Institute of Technology*

Academic Service

Journal Editorial Roles

2022   Guest Editor, International Journal of Social Robotics
Special Issue on Embodied Agents For Wellbeing

2022   Guest Editor, International Journal of Social Robotics
Special Issue on Gender in Robotics

Chair Roles in International Conferences

Mar 2024   Student Design Competition Chair
International Conference on Human-Robot Interaction

Mar 2023   Local Chair
International Conference on Human-Robot Interaction

Nov 2020   Workshop Chair
International Conference on Social Robotics

Mar 2020   General Chair
HRI Pioneers Workshop (co-located with the International Conference on Human Robot Interaction)

International Program Committee Service

Nov 2022   Program Committee
International Conference on Human-Robot Interaction (HRI)

Sep 2021   Senior Program Committee/Area Chair (Studies)
International Conference on Affective Computing & Intelligent Interaction (ACII)

Additional Organisation of International Academic Events

Aug 23   Workshop Organiser
'BAILAR: Behavior Adaptation and Learning for Assistive Robotics' held jointly with the IEEE International Conference on Robot and Human Interactive Communication (RO-MAN) 2023

Oct 2022   Workshop Organiser
'Affective Robotics for Well-being' held jointly with the International Conference on Affective Computing and Intelligent Interaction (ACII) 2022

Aug 21, 22   Workshop Organiser
'GENDERING ROBOTS (GENR): Ongoing (Re)configurations of Gender in Robotics' held jointly with the IEEE International Conference on Robot and Human Interactive Communication (RO-MAN) 2021 and 2022

Mar 2021   Panel Co-Chair
'Social Robotics and Trustworthy Human-Robot Interaction for Healthcare' at the WASP-HS AI and Healthcare Community Meeting hosted by Umeå University.

Nov 2020   Workshop Organiser
'Future Digileaders Career Workshop' hosted by KTH Royal Institute of Techology.

Nov 2020   Workshop Organiser
'Enriching HRI Research with Qualitative Methods' workshop held jointly with the International Conference on Social Robotics

Mar 19, 20	Workshop Organiser
	'What Could go Wrong?' workshop held jointly with the International Conference on Human Robot Interaction

Reviewer for Journal Articles

International Journal of Social Robotics 2019 - 2023

ACM Transactions on Human-Robot Interaction 2018 - 2022

ACM Transactions on Computer-Human Interaction 2021 - 2022

Frontiers in Robotics and AI 2021 - 2022

International Journal of Child-Computer Interaction 2021

MDPI Multimodal Technologies and Interaction 2021

IEEE Transactions on Transactions on Learning Technologies 2022

Reviewer for Conference Proceedings

ACM/IEEE International Conference on Human-Robot Interaction (HRI) 2018 - 2023

IEEE International Conference on Robot & Human Interactive Communication (RO-MAN) 2017 - 2023

Persuasive Technology Conference 2022

ACM In-Cooperation Conversational User Interfaces (CUI) 2021

ACM Designing Interactive Systems (DIS) 2021

Robotics: Science and Systems (RSS) 2020

ACM International Conference on Multimodal Interaction (ICMI) 2018

Selected Media, Exhibition and Public Engagement Highlights

2021-	Research on "Feminist Robots" in International Media
	My work on feminist social robotics has been featured in Swedish popular science magazine Forskning och Framsteg, the German IT news site heise online and the US based Slate news.
Nov 2019	PhD Robot Fitness Coach in International Media
	The robot fitness coach I developed as a culmination of my PhD studies was filmed for on the BBC's weekly, national technology show BBC Click and was also featured on televised (BBC, ITV, Sky News), print and online news, nationally and internationally (see e.g. Irish Independent).
Apr 2019	Regent Street Cinema, London
	Invited panelist for discussion on robots and society following a screening of Blade Runner.
Feb 2018	EPSRC Science for a Successful Nation Showcase
	The therapy coach Pepper robot demonstrator I developed during my PhD was chosen as exemplar research supporting science for a healthy nation. I exhibited the robot and represented the Bristol Robotics Laboratory at the one day event held at the Royal Society, London.
May 2017	Robot Takeover, London Science Museum
	The therapy coach Pepper robot demonstrator I developed during my PhD was exhibited at the London Science Museum as part of a robotics edition of their popular Lates evening series.
April 2017	Designed, organised and led programming day with house in-built robots for outreach, *Abbeywood Community School, Bristol*
Nov 2017	"How I got totally hooked on robotics"
	Profile in The Guardian on behalf of the IMechE, online and in print.

Publications

Doctoral Thesis

K. Winkle, 2020 "Expert-Informed Design and Automation of Persuasive, Socially Assistive Robots" (Doctoral dissertation, University of Bristol). *PhD by monograph: 63,275 words; 272 pages*

International Journal Articles

[J5] **K. Winkle**, E. Lagerstedt, I. Torre, A. Offenwanger "15 Years of (Who)man Robot Interaction: Reviewing the H in Human-Robot Interaction" ACM Transactions on Human-Robot Interaction (2022)

[J4] A. Galatolo, I. Leite, **K. Winkle** "The Right (Wo)Man for the Job? Exploring the Role of Gender when Challenging Gender Stereotypes with a Social Robot" International Journal of Social Robotics (2022)

[J3] **K. Winkle**, E. Senft, S. Lemaignan "LEADOR: A Method for End-To-End Participatory Design of Autonomous Social Robots" Frontiers in Robotics and AI (2021)

[J2] H.Webb, M. Dumitru, A. van Maris, **K. Winkle**, M. Jirotka, A. Winfield "Role-play as Responsible Robotics: The Virtual Witness Testimony Roleplay Interview for Investigating Hazardous Human-Robot Interactions" Frontiers in Robotics and AI (2021)

[J1] **K. Winkle**, P. Caleb-Solly, A. Turton and P. Bremner, "Mutual Shaping in the Design of Socially Assistive Robots: A Case Study on Social Robots for Therapy." International Journal of Social Robotics (2019)

Books and Book Chapters

[B2] A. Winfield, A. van Maris, **K. Winkle**, et al. (2022) "Ethical Risk Assessment for Social Robots: Case Studies in Smart Robot Toys" In Towards Trustworthy Artificial Intelligent Systems (pp. 61-76), Springer, Cham.
[B1] A. Winfield, **K. Winkle**, H. Webb, U. Lyngs, M. Jirotka, C. Macrae (2021) "Robot Accident Investigation: A Case Study in Responsible Robotics". In Software Engineering for Robotics (pp. 165-187), Springer, Cham.

Contributions to Conferences

Peer Reviewed, Full Paper Contributions to Conferences:

[C13] **K. Winkle**, D. McMillan, M. Arnelid, K. Harrison, M. Balaam, E. Johnson, and I. Leite. "Feminist Human-Robot Interaction: Disentangling Power, Principles and Practice for Better, More Ethical HRI." in Proceedings of the 2023 ACM/IEEE International Conference on Human-Robot Interaction, Stockholm, Sweden **Acceptance rate: 25%; Awarded Best Paper**

[C12] T. M. Parreira, S. Gillet, **K. Winkle**, and I. Leite, "How Did We Miss This? A Case Study on Unintended Biases in Robot Social Behavior" in Companion Proceedings (alt.HRI) of the 2023 ACM/IEEE International Conference on Human-Robot Interaction, Stockholm, Sweden

[C11] S. Gillet, **K. Winkle**, G. Belgiovine and I. Leite, "Ice-Breakers, Turn-Takers and Fun-Makers: Exploring Robots for Groups with Teenagers" in 31st IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), Naples, Italy 2022

[C10] **K. Winkle**, R. Jackson, G. Melsión, D.Brščić, I. Leite and T. Williams "Norm-Breaking Responses to Sexist Abuse: A Cross-Cultural Human Robot Interaction Study" in Proceedings of the 2022 ACM/IEEE International Conference on Human-Robot Interaction, Sapporo, Japan **Acceptance rate: 25%**

[C9] **K. Winkle**, G. Melsión, D. McMillan and I. Leite, "Boosting Robot Credibility and Challenging Gender Norms in Responding to Abusive Behaviour: A Case for Feminist Robots" in Companion Proceedings (alt.HRI) of the 2021 ACM/IEEE International Conference on Human-Robot Interaction, Colorado, USA **Acceptance rate: 22%**

[C8] **K. Winkle**, P. Caleb-Solly, U. Leonards, A. Turton and P.Bremner, "Assessing and Addressing Ethical Risk from Anthropomorphism and Deception in Socially Assistive Robots" in Proceedings of the 2021 ACM/IEEE International Conference on Human-Robot Interaction, Colorado, US. **Acceptance rate: 23%**

[C7] **K. Winkle**, S. Lemaignan, P. Caleb-Solly, U. Leonards, A. Turton and P.Bremner, "In-Situ Learning from a Domain Expert for Real World Socially Assistive Robot Deployment" in Proceedings of the 2020 Robotics: Science and Systems Conference **Acceptance rate: 32%**

[C6] A. Winfield and **K. Winkle**, "RoboTed: a case study in Ethical Risk Assessment" in Proceedings of the 2020 International Conference on Robot Ethics and Standards **Awarded Best Paper**

[C5] **K. Winkle**, A. van Maris, "Social Influence and Deception in Socially Assistive Robotics" in Proceedings of the 2019 International Conference on Robot Ethics and Standards, London, UK

[C4] **K. Winkle**, S. Lemaignan, P. Caleb-Solly, U. Leonards, A. Turton and P.Bremner, "Effective Persuasion Strategies for Socially Assistive Robots" in Proceedings of the 2019 ACM/IEEE International Conference on Human-Robot Interaction, Daegu, South Korea. ***Acceptance rate: 24%***

[C3] H.Webb, M. Jirotka, A. Winfield and **K. Winkle**, "Human-robot relationships and the development of responsible social robots" in Proceedings of the Halfway to the Future Symposium 2019, Nottingham, UK 2019

[C2] **K. Winkle**, P. Caleb-Solly, A. Turton and P.Bremner, "Social Robots for Engagement in Rehabilitative Therapies: Design Implications from a Study with Therapists" in Proceedings of the 2018 ACM/IEEE International Conference on Human-Robot Interaction, Chicago, USA ***Acceptance rate: 24%; Awarded Best Paper***

[C1] **K. Winkle** and P. Bremner, "Investigating the real world impact of emotion portrayal through robot voice and motion" in 26th IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN), Lisbon, Portugal 2017

Peer Reviewed Conference Poster and Workshop Publications:

[W11] **K. Winkle**, E. Lagerstedt, I. Torre and A. Offenwanger, "A Systematic Review of Participant Gender in 15 Years of HRI User Studies" at Diversity, Equity, and Inclusion (DEI) in HRI co-located with the 2022 ACM/IEEE International Conference on Human-Robot Interaction

[W10] **K. Winkle**, RB. Jackson, A. Berjarano and T. Williams, "On the flexibility of robot social identity performance: benefits, ethical risks and open research questions for HRI" at Robo-Identity co-located with the 2021 ACM/IEEE International Conference on Human-Robot Interaction

[W9] **K. Winkle**, G. Melsión, M. Arnelid, D. McMillan, M. Balaam, K. Harrison, E. Johnson and I. Leite "Feminism x Social Robotics" for GENDERING ROBOTS: Ongoing (Re)configurations of Gender in Robotics Workshop at the 2021 IEEE International Conference on Robot and Human Interactive Communication

[W8] **K. Winkle**, R. Jackson, A. Bejarano, T. Williams, "On the Flexibility of Robot Social Identity Performance: Benefits, Ethical Risks and Open Research Questions for HRI" for the 'Robo-Identity: Artificial identity and Multi-Embodiment' Workshop at the 2021 ACM/IEEE International Conference on Human-Robot Interaction

[W7] R. Jackson, **K. Winkle**, A. Bejarano, T. Williams, "Design, Performance, and Perception of Robot Identity" for the 'Robo-Identity: Artificial identity and Multi-Embodiment' Workshop at the 2021 ACM/IEEE International Conference on Human-Robot Interaction

[W6] **K. Winkle**, S. Lemaignan, P. Caleb-Solly, U. Leonards, A. Turton and P.Bremner, "Couch to 5km Robot Coach: An Autonomous, Human-Trained Socially Assistive Robot" in Companion Proceedings of the 2020 ACM/IEEE International Conference on Human-Robot Interaction

[W5] **K. Winkle**, M. Jirotka, U. Lyngs, C. Macrae, H. Webb and A. Winfield ""What Could Possibly Go Wrong?" Logging HRI Data for Robot Accident Investigations" in Companion Proceedings of the 2020 ACM/IEEE International Conference on Human-Robot Interaction

[W4] Y.Sallami, **K. Winkle**, N. Webb, S. Lemaignan and R. Alami "The Unexpected Daily Situations (UDS) Dataset: A New Benchmark for Socially-Aware Assistive Robots" in Companion Proceedings of the 2020 ACM/IEEE International Conference on Human-Robot Interaction

[W3] **K. Winkle** "Social Influence in HRI with Application to Social Robots for Rehabilitation" HRI Pioneers Workshop, Daegu, South Korea 2019

[W2] **K. Winkle**, P. Caleb-Solly, A. Turton and P.Bremner, "Patient engagement with rehabilitative therapy programmes: Therapist strategies and affecting influences" Society of Research in Rehabilitation Winter Conference, Bristol 2018

[W1] **K. Winkle**, "Social Robots for Motivation and Engagement in Therapy," Doctoral Consortium at the 19th ACM International Conference on Multimodal Interaction, Glasgow, UK, 2017

Popular Science Publications

[P1] **K. Winkle**, "Can Feminist Robots Challenge Our Biases?", IEEE Spectrum Magazine (2021)