

Dr. Ruud Hortensius

Department of Social, Health & Organisational Psychology
Utrecht University, The Netherlands

r.hortensius@uu.nl
www.ruudhortensius.nl / human-plus.gitlab.io

Academic appointments

2020 – present **Assistant Professor, Utrecht University, The Netherlands**

Department of Social, Health & Organisational Psychology

2017 – 2020 **Postdoctoral Researcher, University of Glasgow, United Kingdom**

Institute of Neuroscience and Psychology. From January 2017 – April 2018: School of Psychology, Bangor University, United Kingdom. Advisor: Prof. Emily S. Cross

2015 – 2016 **Postdoctoral Researcher, University of Cape Town, South Africa**

Department of Psychiatry and Mental Health (UCT) and Department of Cognitive Neuroscience, Maastricht University, The Netherlands. Advisor/host: Prof. Beatrice de Gelder, Prof. Dan J. Stein

Education

2016 **PhD *Cum Laude*, Tilburg University, The Netherlands**

Sympathy for the Devil - On the Neural Mechanisms of Threat and Distress Reactivity

Advisor: Prof. Beatrice de Gelder. Thesis available [here](#)

2011 **MSc, Utrecht University, The Netherlands**

Neuroscience and Cognition. Projects with Dr Dennis Schutter (UU) and Prof. Eddie Harmon-Jones (Texas A&M)

2008 **BSc *Cum Laude*, Utrecht University, The Netherlands**

Psychology, Major: Cognitive Neuroscience

2005 **BSc, University of Applied Sciences Utrecht, The Netherlands**

Social Work, focus on child psychiatry

Honours and grants

2024 – 2029 Starting Grant, European Research Council (EU) €1,500,000, role: PI

2023 – 2024 Profiling Project, Utrecht Young Academy (NL) €20,000, role: coordinator

2023 – 2024 Open Competition XS, Dutch Research Council (NL) €50,000, role: PI

2023 – 2028 Member of the Utrecht Young Academy (NL)

2023 APS Rising Stars award, Association for Psychological Science

2023 Open Competition XS, Dutch Research Council (NL)

2022 Human-AI Student Research Project Fund, Human-AI Alliance (NL)

2019 – 2021 Scientific Research Grant (PI), Bial Foundation (Portugal)

2021 Human-centered AI Small Grant, Utrecht University (NL)

2021 Human-AI Student Research Project Fund, Human-AI Alliance (NL)

2020 Public Engagement Seed Fund, Utrecht University (NL)

2020 Nominated for Research Culture Award, University of Glasgow

2019 Fellow, Kavli Summer Institute in Cognitive Neuroscience, USA

- 2019 John Robertson Bequest Fund (PI), University of Glasgow
- 2019 Flexible Talent Mobility Award, BBSRC (UK)
- 2017 Creative Practitioner-in-Residence (co-applicant), ESRC (UK)
- 2017 EPS Research Workshop Grant (co-applicant), Experimental Psychology Society (UK)
- 2016 Professors' Fund (PI), Maastricht University (NL)
- 2015 Van der Gaag Grant (PI), Royal Netherlands Academy of Arts and Sciences (NL)
- 2015 Erasmus+ grant, European Commission, Education & Training (EU)
- 2014 Best presentation, International Summer School in Social Cognitive Neuroscience, Italy
- 2010 Travel grant, K.F. Hein Society (NL)
- 2006 – 2008 Honours student, University wide Honours Minor, Utrecht University

Selected Publications (*shared co-authorship, | student project, full list)

- Hortensius R.** & Wiese, E. (2023). A neurocognitive view on the depiction of social robots. Commentary on target article by Clark and Fischer. *Behavioral and Brain Sciences*
- Liefoghe, B., Oliveira, M. J. B., Leisten, L. M., Hoogers, E., Aarts, H., & **Hortensius, R.** (2022). Are Faces Merely Labelled as Artificial Trusted Less? *Collabra: Psychology*
- | Diana, F., Juárez-Mora, O. E., Boekel, W., **Hortensius, R.** & Kret, M. (2023). How video calls affect mimicry and trust during interactions. *Philosophical Transactions of the Royal Society B: Biological Sciences*
- | Hogenhuis, A. & **Hortensius R.** (2022). Domain-specific and domain-general neural network engagement during human-robot interactions. *European Journal of Neuroscience*
- | Diana, F., Kawahara, M., Saccardi, I., **Hortensius, R.**, Tanaka, A., & Kret, M. (2022) Implicit and explicit attitudes towards artificial agents: a cross-cultural comparison. *International Journal of Social Robotics*
- | Croijmans, I., van Erp, L., Bakker, A., Cramer, L., Heezen, S., van Mourik, D., Weaver, S., **Hortensius, R.** (2022). No effect of the smell of hexanal on trust in human-robot interaction. *International Journal of Social Robotics*
- | **Hortensius, R.***, Kent, M.*, Darda, K. M., Jastrzab, L. E., Koldewyn, K., Ramsey, R., & Cross, E. S. (2021). Exploring the relationship between anthropomorphism and Theory-of-Mind in brain and behaviour. *Human Brain Mapping*, 42: 4224-4241
- | de Jong D., **Hortensius R.**, Hsieh T., & Cross E. S. (2021). Empathy and schadenfreude in human–robot teams. *Journal of Cognition*, 4: 35
- | Timmerman, R.+ , Hsieh, T. +, Henschel, A.* , **Hortensius, R.***, & Cross, E. S.* (2021). Individuals expend more effort to compete against robots than humans after observing competitive human-robot interactions. The 2021 International Conference on Social Robotics, 044
- | Henschel A.* , **Hortensius R.*** & Cross E.S. (2020). Social Cognition in the Age of Human-Robot Interaction. *Trends in Neurosciences*, 43: 373-384
- Cross E.S.* , **Hortensius R.*** & Wykowska A.* (2019). From social brains to social robots: Applying neurocognitive insights to human-robot interaction. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 374:20180024
- | Cross E.S., Riddoch A.R., Pratts J., Titone S., Chaudhury B. & **Hortensius R.** (2019). A neurocognitive investigation of the impact of socialising with a robot on empathy for pain. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 374:20180034

Hortensius R., Hekele, F. & Cross E.S. (2018). The perception of emotion in artificial agents. *IEEE Transactions on Cognitive and Developmental Systems*, 10:852-864

Hortensius R.* & Cross E.S.* (2018). From automata to animate beings: The scope and limits of attributing socialness to robots. *Annals of the New York Academy of Sciences*, 426:93-110

Hortensius R. & de Gelder B. (2018). From empathy to apathy: The bystander effect revisited. *Current Directions in Psychological Science*, 27:249-256

Preprints

| Leisten, L. M., Heyselaar, E., Bosse, T., & **Hortensius, R.** (2022, November 12). Children's Reciprocity and Relationship Formation with a Robot Across Age. <https://doi.org/10.31219/osf.io/8au6v>

Hortensius R.*, Chaudhury B*, Hoffmann M. & Cross E.S. (2022). Tracking Human Interactions with a Commercially-available Robot over Multiple Days [version 1; peer review: 1 approved, 2 approved with reservations] *Open Research Europe*, 2:97

Supervision

<i>Postdoc</i>	Manuel Barbosa de Oliveira (2022 – present)
<i>PhD student</i>	Fabiola Diana (2021 – present, Leiden University), co-supervisor, main supervisor Prof. Mariska Kret Anna Henschel, social motivation and human-robot interaction (2019-2020, main supervisor Prof. Emily Cross). <i>She is currently a project manager at Wissenschaft im Dialog</i>
<i>Student assistant</i>	Luca Leisten, research assistant on AI and psychology projects (2021) Geertje Hendriks, public engagement research project and Embodied AI initiative (2021 – present).
<i>Research Technician</i>	Michaela Kent, anthropomorphism and dehumanisation (2019-2020). <i>She is currently a PhD student at Western University</i>

Teaching (selection)

<i>Utrecht University</i>	<i>Coordinator</i> , Honours College Social and Behavioural Sciences (BSc) <i>Lecturer and Instructor</i> , Research Seminars and Projects in Social Neuroscience (BSc, organiser), Psychology and Economic Behaviour (BSc, organiser), Methods in AI Research (MSc), Advances in research in Behavioral Regulation I: Social Behavior (MSc), Introduction to Cognitive Science (BSc), AI for an Open Society (BSc), The 21 st Century and the Modern Person (BSc). <i>Supervision</i> of thesis and research projects for Artificial Intelligence (MSc), University College Utrecht (BSc), Social and Health Psychology (MSc), Social, Health, and Organisational Psychology (MSc), Artificial Intelligence (BSc), RiSE DAAD and ERASMUS+ interns.
<i>University of Glasgow</i>	<i>Developer/Organiser/Lecturer</i> , Socially Intelligent Artificial Technologies in Society year 4/PGT (BSc/MSc) module <i>Lecturer</i> , Social Robotics year 4/PGT (BSc/MSc) module <i>Supervision</i> of BSc and MSc research thesis students and interns, RiSE DAAD and ERASMUS+ interns

Professional service (selection)

<i>Editor</i>	<i>International Journal of Social Robotics (associate editor)</i> <i>Philosophical Transactions of the Royal Society B</i> theme issue <i>From social brains to social robots: Applying neurocognitive insights to human-robot interaction</i> with E. Cross and A. Wykowska (publication date: Spring 2019)
<i>Member</i>	Neuro-symbolic AI Special Interest Group board member, Human-centered Artificial Intelligence, Utrecht University Athena Swan Culture Development Group, Institute of Neuroscience and Psychology, University of Glasgow (2019 – 2020)
<i>Chair</i>	FSO project Social Neuroscience, Utrecht University, The Netherlands (2022 – 2024) Design competition, 13th International Conference on Social Robotics, Singapore (2021) Tutorials, Affective Computing and Intelligent Interaction conference, Japan (2022)

Organized workshop and symposia (selection)

2020 – present	<i>Embodied AI</i> . Panel and seminar series co-organized with M. de Graaf and Z. Yumak, Utrecht University
2018	<i>Cognitive and Social Neuroscience Methods for HRI</i> . Workshop co-organized with E. Cross, A. Wykowska, G. Metta, and C. Becchio at the 13th ACM/IEEE International Conference on Human Robot Interaction, Chicago, USA
2017	<i>The Emerging Social Neuroscience of Social Robotics</i> . Workshop co-organized with E. Cross at Bangor University
2017	<i>Real worlds for virtual humans – Changing Perspectives</i> . Symposium co-organized with S. Seinfeld (University of Barcelona) at the International Convention of Psychological Science, Austria

Public engagement (selection)

2023	<i>MuseumJeugdUniversiteit</i> . As part of this lectureseries for children, I gave a public lecture to 7-12 year old children <i>AI parade</i> . Let's talk about AI, a conversation with the general public on AI in the public library of Utrecht
2022	<i>Breinbreker Festival</i> . For this festival we developed an interactive game to measure reciprocity during child-robot interaction.
2021	<i>InScience Festival</i> . During this festival we explored decision-making during human-robot interaction <i>Grandpa, grandma, robot and I</i> . Funded by an Utrecht University public engagement seed fund this project starts the conversation on the integration of robots in the social milieu of children and their grandparents
2019	<i>Public talk</i> at the Pint of Science Festival “How to Train Your Robot?” event, Glasgow <i>Panelist and speaker</i> at the post-show discussion of “Interference”, a trilogy of near future plays by the National Theatre of Scotland, Glasgow
2017 - 2018	<i>A popularity contest in the robotic petting zoo</i> . As part of an ESRC-IAA funded artist-in-residency of designer Merel Bekking, I co-developed this interactive art performance. Presented as a stand-alone event at Pontio Bangor University's Art and Innovation Centre, and as part of the 2018 Glasgow Science Festival and the 2018 British Science Festival. More info at the Petting Zoo's website

2016 – present *Interview* for *BNR Nieuwsradio*, *BBC Radio Wales*, in Dutch newspapers *de Volkskrant*, *Het Parool*, *RTL Nieuws* website, *Radio 1*, *Radio 5*, *Radio 1 Belgium*, and *Psychologie Magazine*. Items are available [here](#).

Invited conference talks and departmental seminars (selection)

2023 The Future of Psychology and Robotics, Integrative Science Symposium, International Convention of Psychological Science, Brussels, Belgium
Neurocognitive perspective on Human-Robot Interaction workshop, International Convention of Psychological Science, Brussels, Belgium

2022 INTERACT! Workshop, Ruhr-Universität Bochum, Germany
European Society for Cognitive and Affective Neuroscience 2022, Vienna, Austria
Human-Robot Interaction Winterschool, Gent, Belgium

2021 Macquarie Methods and Metascience meeting, Macquarie University, Australia
Behavioural Science Institute, Radboud University, The Netherlands
socialBRIDGES e-conference, The near-future of AI
Department of Psychology Seminar Series, University of Dundee, UK

2020 Cognition Research Group in Stirling, University of Stirling, UK

2019 3rd Human Brain Project Curriculum Workshop Series - Cognitive systems for non-specialists, UK
21st Meeting of the European Society for Cognitive Psychology, Spain
“Bystander Roles in Peace and Conflict”, Lorentz Center Workshop, The Netherlands

2018 4th Workshop on Virtual Social Interaction, UK
3rd meeting of the European Social and Affective Neuroscience Society, The Netherlands
13th ACM/IEEE International Conference on Human Robot Interaction, USA

2016 International Convention of Psychological Science, Austria
Department of Psychiatry and Mental Health, University of Cape Town, South Africa
Studies in Historical Trauma and Transformation, Stellenbosch University, South Africa