

Giulia Perugia curriculum vitae



Uppsala Social Robotics Lab

Department of Information Technology - Uppsala University (UU)
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Social Robotics, Human-Robot Interaction (HRI), Ethics of HRI, Societal Issues in HRI, Multimodal and Affective Interaction, Assistive and Educational Robotics

EDUCATION

Oct. 2014 / Oct. 2018

Ph.D. in Socially Assistive Robotics (Double Degree)

Technical University of Catalonia – UPC (Spain)
Eindhoven University of Technology –TU/e (Netherlands)

Thesis: *ENGAGE-DEM: A Model of Engagement of People with Dementia*
Supervisors: Prof. Dr. Andreu Català-Mallofré, Prof. Dr. Matthias Rauterberg,
Prof. Dr. Marta Díaz-Boladeras, Dr. Emilia Barakova
Topics: Social Robotics, HRI, People with Dementia, Multimodal HRI,
Engagement Modelling in HRI, Psychophysiology

Nov. 2011 / Sept. 2013

MSc in Cognitive Science

University of Siena – Unisi (Italy)

Thesis: *Social Robots Supporting the Narrative Abilities of People with Dementia*
Supervisors: Prof. Dr. Patrizia Marti, Prof. Dr. Oronzo Parlangei
Topics: Social Robotics, HRI, People with Dementia, Multimodal HRI, Storytelling
Final grade: 110/110 cum laude

Nov. 2007 / July 2011

BA in Literature and Linguistics

University Roma Tre (Italy)

Thesis: *Dino Buzzati between Fantastic and Fairytale*
Supervisors: Dr. Ugo Fracassa
Topics: Literature, Linguistics, Fantastic Literature, Fairytales
Final grade: 110/110

Sept. 2005 / Aug. 2007

Professional Degree in Graphic Design

Academy of the Arts and New Technologies – AANT (Italy)

Topics: Graphic Design, Copywriting, Art Direction, Photography,
Theory of Perception and Gestalt Psychology, Packaging, Brand Design

ACADEMIC HONORS & AWARDS

Sept. 2020

Distinguished Interdisciplinary Research Award (2nd place)

Robotics Society of Japan (RSJ) and Korean Robotics Society (KROS)
29th IEEE International Conference on Robot & Human Interactive Communication
(RO-MAN 2020)

- Sept. 2020** **Best Paper Award (2nd place)**
29th IEEE International Conference on Robot & Human Interactive Communication (RO-MAN 2020)
- Sept. 2017** **Distinguished Interdisciplinary Research Award (Winner)**
Robotics Society of Japan (RSJ) and Korean Robotics Society (KROS)
26th IEEE International Conference on Robot & Human Interactive Communication (RO-MAN 2017)
- Sept. 2013** **Summa cum Laude - MSc in Cognitive Science**
University of Siena (UNISI)

EMPLOYMENT

- Nov. 2018 / Current** **Postdoctoral Researcher**
Uppsala Social Robotics lab – Dept. of Information Technology
Uppsala University – UU (Sweden)

The postdoc position is partly funded by the SSF COIN project (Co-adaptive human-robot interactive systems) and partly by the Equal Opportunities Funding for Work Environment Projects (UU) of the Department of Information Technology. At present, I am also collaborating in the WASP-HS project “The ethics and social consequences of AI & caring robots”

Research focus: 1) User engagement modelling for human-robot co-adaptation in the context of a geography-themed game (SSF COIN); 2) Investigation of current design practices in gendering humanoid robots and their effects on trust perception in different age groups (Equal Opportunities and WASP-HS project); 3) Study of people’s perceptions of a robot’s trustworthiness and uncanniness in playful interactions (collaboration with Ph.D. students)

- Oct. 2014 / Oct. 2018** **Doctoral Researcher**
Nov. 2016 / Oct. 2018 *Designed Intelligence Group* - Dept. of Industrial Design
Eindhoven University of Technology – TU/e (Netherlands)
- Oct. 2014 / Oct. 2016 *Technical Research Centre for Dependency Care and Autonomous Living (CETpD)*
Department of Automatic Control - Technical University of Catalonia – UPC (Spain)

The Ph.D. position was funded by the Education, Audiovisual and Culture Executive Agency (EACEA) of the European Union under the Erasmus Mundus Joint Doctorate (EMJD) in Interactive and Cognitive Environments (ICE). The first half of the Ph.D. was carried out at UPC and the second half at TU/e

Research Focus: Modelling of the engagement of people with dementia involved in playful activities with a social robot by means of multimodal behavior and psychophysiological data

- Dec. 2012 / Sept. 2013** **Junior Researcher**
Robotics and Learning Technologies Lab – Dept. of Social, Political and Cognitive Sciences
University of Siena – Unisi (Italy)

Tasks: investigator in an experimental study for my MSc’s thesis *Social Robots Supporting the Narrative Abilities of People with Dementia*, (ii) collaboration in studies related to the FP7-ICT project ACCOMPANY (Acceptable robotiCs COMPanions for AgeiNg Years), (iii) cooperation in a series of preliminary studies regarding the introduction of the social robot PARO in the activities of a nursing home





Oct. 2012 / Oct. 2013 **User Experience Designer**
WorkHard Philosophy – Florence (Italy)

User experience designer for the project SocialUp, a web and multi-device platform aimed at optimizing the social housing experience in the temporary residency Porta Palazzo (Turin, Italy). Among the partners of the project: Telecom Italia, and Intesa San Paolo Foundation.

GRANT / FUNDING

- May 2020** **Robot-assisted diagnosis of women's depression around childbirth**
Ph.D. project funded by UU Center for Women's Mental Health (WoMHeR)
Co-Principal Investigator with Prof. Dr. Ginevra Castellano (PI) and Prof. Dr. Fotis Papadoulous (Co-PI)
- Oct. 2014** **Erasmus Mundus Joint Doctorate (EMJD) in Interactive and Cognitive Environments (ICE)**
Recipient of the doctoral Fellowship funded by the Education Audiovisual and Culture Executive Agency (EACEA)

TEACHING

- Spring 2021** **What is a Woman? Interfaculty Course**
WoMHeR doctoral school – UU (third cycle)
Focus: Gendering Humanoid Robots
Teaching: Lectures and seminars
Role: Course developer, lecturer, and examiner
- Spring 2021** **Social Robotics and Human-Robot Interaction (1MD300)** 
Department of Information Technology – UU (second cycle)
Teaching format: Lectures, seminars, and labs
Role: Course developer, lecturer, course responsible, and examiner
- Spring 2020** **Social Robotics and Human-Robot Interaction (1MD300)** 
Department of Information Technology – UU (second cycle)
Teaching format: Lectures, seminars, and labs
Role: Lecturer
- Fall 2019** **Human-Computer Interaction (1MD016)** 
Department of Information Technology – UU (first cycle)
Teaching format: Lectures, seminars, and labs
Role: Lecturer
- Spring 2019** **Advanced Interaction Design (1MD001)** 
Department of Information Technology – UU (second cycle)
Teaching format: Lectures, seminars, and labs
Role: Lecturer and examiner

SUPERVISION / MENTORSHIP

THIRD CYCLE STUDENTS

- 2021 / current** **Mengyu Zhong**
Role: Co-supervisor
Ph.D. project: *Robot-assisted diagnosis of women's depression around childbirth*
Funding: WoMHeR (Center for Women's Mental Health)

2018 / current **Natalia Calvo-Barajas**
Role: Co-supervisor
Ph.D. project: *Modelling trust in human-robot educational interactions*
Funding: MSCA-ITN ANIMATAS project

FIRST AND SECOND CYCLE STUDENTS

2021 **Jude Felix**
Role: Subject Supervisor
MSc in Computer Science (30 credits)
Title: *Designing a tool to automatically annotate dialog acts in a rapid-game dialogue*

2020 **Vilma Reponen and Mikaela Eriksson**
Role: Subject Reader
MSc in Sociotechnical Systems Engineering (30 credits)
Title: *Designing a social feature for an audiobook streaming service and evaluating the impact on user experience*

2020 **Madelene Alanenpää**
Role: Subject Supervisor
BSc in Computer Science (15 credits)
Title: *Gaze detection in human-robot interaction*

2020 **Magdalena Bergqvist**
Role: Subject Supervisor
BSc in Computer Science (15 credits)
Title: *Detecting engagement from prosodic features in spoken dialog*

2020 **Mithun Peddakalva**
Role: Thesis Reviewer
MSc in Embedded Systems (30 credits)
Identification of human emotional states and customization of the storytelling game for Furhat.

VISITING STUDENTS

2021 **Piercosma Bisconti Lucidi**
Role: Co-supervisor during visit
Ph.D. project: *Ethical, social and political implications of AI and Robotics, with a focus on algorithm bias and social robotics*

MENTORSHIP

2012 / 2013 **Inmate Students Tutor for the University of Siena (Unisi)**
Tutor for the MSc and BSc students at the Prison “Ranza” in the Province of Siena

ACADEMIC SERVICE

EDITORIAL ROLES

2020 **Associate Editor**
29th IEEE International Conference on Robot & Human Interactive Communication (RO-MAN)

2020 **Guest Editor**
International Journal of Social Robotics (IJSR)
Special Issue: *Trust, Acceptance and Social Cues in Robot Interaction*

2019 / current **Review Editor**
Frontiers in Robotics and AI – Human-Robot Interaction

ORGANIZATIONAL ROLES

Special Sessions

2020 Main organizer of the Special Session *Societal Consequences of Human-Robot Interaction* at RO-MAN 2020

Workshops

2021 Main organizer of the workshop *GENDERING ROBOTS: Ongoing (Re)configurations of Gender in Robotics* – GENR at RO-MAN 2021

2020 Co-organizer of the 3rd edition of the workshop *Trust, Acceptance and Social Cues in Robot Interaction* - SCRITA at RO-MAN 2020

2019 Co-organizer of the 2nd edition of the workshop *Trust, Acceptance and Social Cues in Robot Interaction* - SCRITA at RO-MAN 2019

Organizing Committee

2020 Poster chair of the 8th ACM International Conference on Human-Agent Interaction (HAI 2020)

Program Committee

2020 12th International Conference of Social Robotics (ICSR 2020)

2020 29th IEEE International Conference on Robot & Human Interactive Communication (RO-MAN 2020)

2019 11th International Conference of Social Robotics (ICSR 2019)

2019 7th ACM International Conference on Human-Agent Interaction (HAI 2019)

REVIEWING ROLES

Journals

2019, 2020, 2021 Frontiers in Robotics and AI – Human-Robot Interaction

2020 ACM Transactions on Human-Robot Interaction

2020 International Journal of Social Robotics (IJSR) [IF=2.516]

2019 Frontiers in Psychology – Human-Media Interaction [IF=2.067]

2019 IEEE Transactions on Affective Computing [IF=7.512]

2019 PLOS ONE [IF=2.740]

2019 Personal and Ubiquitous Computing [IF=2.000]

Conferences

2017, 2018, 2019, 2020 ACM/IEEE International Conference on Human-Robot Interaction (HRI)

2018, 2019, 2020 IEEE International Conference on Robot & Human Interactive Communication (RO-MAN)

2019, 2020 ACM International Conference on Human-Agent Interaction (HAI)

2019, 2020 International Conference on Social Robotics (ICSR)

2020 NordiCHI

SCIENTIFIC OUTREACH

2020 Seminar on Gender in the Academic Work Environment

Role: Organizer

Organization of an interactive seminar on the quality of the academic work environment from a gender perspective. The seminar was given by Dr. Anneli Häyrén and funded by the Gender WORK eNvironment aND wELLbeing pROject (Ge-Wonder)

2020 Game Interaction at the National Museum of Science and Technology

Role: Organizer

One-month stay at the National Museum of Science and Technology where visitors

were given the possibility to interact with the Furhat robot in a geography game

- 2019 Eighth grade student internship at Uppsala Social Robotics Lab**
Role: Co-organizer
One-week internship involving an 8th grade student. The internship was part of the school curriculum and included several research activities with the robots Furhat, NAO, Pepper, and Cozmo
- 2019 Uppsala Rotary club Visit**
Role: Presenter
Visit of Uppsala Rotary Club to Uppsala Social Robotics Lab.
- 2019 Royal Swedish Academy of Engineering Sciences 100-years celebration**
Role: Co-organizer
Presenting research demos on social robotics to high school students at the National Museum of Science and Technology
- 2019 Workshop Sustainability and ethics of ICT and Technology development**
Role: presenter
Demo of Uppsala Social Robotics Lab in the context of a workshop organized for a delegation of Japanese researchers working on the ethics of technology
- 2019 Social Robotics booth at Scifest**
Role: Co-organizer
Organization of the booth of Uppsala Social Robotics Lab in the context of Scifest. Scifest is an annual science fair organized by UU for children

INVITED PRESENTATIONS

- March 2021 CLASP (Centre for linguistic theory and studies in probability) – Gothenburg University**
Title: *I Can See it in Your Eyes: Gaze as an Implicit Cue of Uncanniness and Task Performance in Repeated Interactions with Robots*
Invited Lecture
- March 2019 ST Union Yearly Meeting**
Title: *Social Robots: A New Robotics Revolution?*
Segerstedthuset – Uppsala (Sweden)
- Nov. 2017 Robotics Technology Symposium**
Title: *The Psychophysiology of Engagement with Social Robots*
TU/e High Tech System Center – Eindhoven (Netherlands)
- Nov. 2017 Research Meet, Social Robotics: The Future of Human-Machine Relationships**
Title: *Social HRI: One Size Fits All?*
TU/e Eindhoven Campus – Eindhoven (Netherlands)
- July 2017 London Rehab Week**
Title: *Modelling Engagement in Dementia through Behavior. Contribution for Socially Interactive Robotics*
[Among the 6% of ICORR 2017 papers invited for oral presentation]
Queen Elizabeth II Center – London (UK)
- Sept. 2016 IEEE/EURASIP Summer School on Signal Processing, Semantics, and Media**
Title: *A Measurement Framework for Engagement in Dementia. Database Collection*
Hotel Lagorai – Cavalese (Italy)
- Aug. 2015 Interactive and Cognitive Environments Summer School (ICISS)**
Title: *Distinguishing Apathy and Depression through their Behavioral Symptoms:*

The Role of Sensing Technologies
Queen Mary University of London (QMUL) – London (UK)

MEDIA COVERAGE

- Dec. 3rd, 2013** **Local TV channel Canale 3**
Special TV show on the experimental study I ran for my MSc thesis
Social Robots Supporting the Narrative Abilities of People with Dementia
- Nov. 27th, 2013** **Regional online magazine *In Toscana***
Da Siena arriva la foca robot che aiuta gli anziani
[Eng.] *From Siena, the seal that helps the elderly*
- Nov. 27th, 2013** **Local online magazine *Siena News***
Università di Siena: presentati i risultati della sperimentazione “Robot e anziani: quale futuro possibile?”
[Eng.] *University of Siena: presented the results of the experiment “Robot and elderly: which future is possible?”*
- Nov. 27th, 2013** **Local online magazine *Il Cittadino Online***
Robot e anziani: il futuro secondo i ricercatori di Siena
[Eng.] *Robot and elderly: the future according to the researchers of Siena*
- August 23rd, 2013** **Italian National Magazine *L'Espresso***
Circulation: 263 567 copies
Con PARO è tutta un'altra vita
[Eng.] *With PARO it's another life*

SPECIALISTIC TRAINING

- Sept. 2020 / Sept. 2021** **Mentorship Program of the Faculty of Science and Technology (UU)**
Training program supporting promising researchers beginning their academic career
- Jan. 2019** **Facial Action Coding System (FACS) – Paul Ekman Group**
Training
- Jan. 2019** **Micro-expressions Training Tool (METT) - Paul Ekman Group**
Certificate n. 102272: Expert Level
- Jan. 2019** **Subtle Expressions Training Tool (SETT)**
Certificate n. 102211: Expert Level
- Aug. 2016** **Inferential Statistics – University of Amsterdam (Coursera)**
Certificate n. LXW4D7TT2F58 – Grade: 95.35%
- May 2016** **Basic Statistics – University of Amsterdam (Coursera)**
Certificate 4AZZEBRUB5YK – Grade: 99.67%
- Mar. 2016** **Quantitative Methods – University of Amsterdam (Coursera)**
Certificate GPYJQLXGEZW6 - Grade: 96.38%

REFERENCES

Prof. Dr. Åsa Cajander - Uppsala University – UU (Sweden)
Full Professor of Human-Computer Interaction

Head of Health Technology and Organisations (HTO) research group
Deputy Head of the Visual Information and Interaction (VI2) Division
Advisor to the Vice-Chancellor on Equal Opportunities
asa.cajander@it.uu.se

Prof. Dr. Andreu Català-Mallofré - Technical University of Catalonia – UPC (Spain)
Full Professor in Assistive Technologies
Head of the Technical Research Centre for Dependency Care and Autonomous Living
andreu.catala@upc.edu

Dr. Maike Paetzel-Prüsmann - University of Potsdam (Germany)
Postdoctoral Researcher in Computational Linguistics
paetzel-pruesmann@uni-potsdam.de

Dr. Mikael Laaksoharju - Uppsala University – UU (Sweden)
Associate Professor in Ethics and Human-Computer Interaction
mikael.laaksoharju@it.uu.se

PUBLICATIONS

THESES

- T2.** **Perugia, G.** (2018). *ENGAGE-DEM: A Model of Engagement of People with Dementia* (doctoral thesis). Technical University of Eindhoven: Eindhoven, the Netherlands.
- T1.** **Perugia, G.** (2013). *Robot Supporting Narratives: An Experimental Study with Elders Affected with Dementia and Cognitive-relational Disturbances* (Master's thesis). University of Siena: Siena, Italy.

JOURNAL ARTICLES (PEER REVIEWED)

- J8.** **Perugia, G.,** Paetzel-Prüsmann, M., Hupont, I., Varni, G., Chetouani, M., Peters, C., & Castellano, G. (2021). Can You Mimic How I Feel? How Embodiment and Humanlikeness Affect Spontaneous and Instructed Mimicry of Artificial Agents in an Emotion Recognition Task. *Frontiers in Robotics and AI* (submitted).
- J7.** Feng, Y., **Perugia, G.,** Suihuai, Y., Barakova, E., Hu, J., & Rauterberg, M. (2021). Exploring the Role of System Interactivity and Multimodal Stimuli on Engagement of Dementia During Context-Enhanced Human-Robot Interaction. *International Journal of Social Robotics* (under review). [IF= 2.516]
- J6.** Calvo-Barajas, N., Elgarf, M., **Perugia, G.,** Paiva, A., Peters, C., & Castellano, G. (2021). Hurry up, we need to find the key! How Regulatory Focus Design Affects Children's Trust in a Social Robot. *Frontiers in Robotics and AI* (under review).
- J5.** **Perugia, G.,** Paetzel-Prüsmann, M., Alanenpää, M., & Castellano, G. (2021). I Can See it in Your Eyes: Gaze towards a Robot as an Implicit Cue of Uncanniness and Task Performance in Long-term Interactions. *Frontiers in Robotics and AI* (accepted).
- J4.** Paetzel-Prüsmann, M., **Perugia, G.,** & Castellano, G. (2021). The Influence of Robot Personality on the Development of Uncanny Feelings. *Computers in Human Behavior*, 106756. [IF= 5.003]
- J3.** **Perugia, G.,** Díaz-Boladeras, M., Català-Mallofré, A., Barakova, E. I., & Rauterberg, M. (2020). ENGAGE-DEM: a model of engagement of people with dementia. *IEEE Transactions on Affective Computing*, 1-18. [IF=7.512]
- J2.** **Perugia, G.,** van Berkel, R., Díaz-Boladeras, M., Català-Mallofré, A., Rauterberg, M., &

Barakova, E. I. (2018). Understanding Engagement in Dementia through Behavior. The Ethographic and Laban-Inspired Coding System of Engagement (ELICSE) and the Evidence-Based Model of Engagement-related Behavior (EMODEB). *Frontiers in Psychology*, 9, 690. [IF=2.067]

- J1. Perugia, G.,** Rodríguez-Martín, D., Boladeras, M. D., Mallofré, A. C., Barakova, E., & Rauterberg, M. (2018). Quantity of movement as a measure of engagement for dementia: The influence of motivational disorders. *American Journal of Alzheimer's Disease & Other Dementias*®, 33(2), 112-121. [IF=1.544]

CONFERENCE PAPERS (PEER REVIEWED)

- C7. Perugia, G.,** Paetzel, M., & Castellano, G. (2020, November). On the Role of Personality and Empathy in Human-Human, Human-Agent, and Human-Robot Mimicry. In *International Conference on Social Robotics* (pp. 120-131). Springer, Cham.
- C6.** Calvo-Barajas, N., **Perugia, G.,** & Castellano, G. (2020). The Effects of Robot's Facial Expressions on Children's First Impressions of Trustworthiness. In *2020 29th IEEE International Conference on Robot and Human Interactive Communication (RO-MAN)* (pp. 165-171). IEEE.
- C5.** Calvo-Barajas, N., Elgarf, M., **Perugia, G.,** Peters, C., & Castellano, G. (2020, March). Can a Social Robot Be Persuasive Without Losing Children's Trust?. In *Proceedings of the Companion of the 2020 ACM/IEEE International Conference on Human-Robot Interaction* (pp. 157-159).
- C4.** Paetzel, M., **Perugia, G.,** & Castellano, G. (2020, March). The Persistence of First Impressions: The Effect of Repeated Interactions on the Perception of a Social Robot. In *Proceedings of the 2020 ACM/IEEE International Conference on Human-Robot Interaction* (pp. 73-82).
- C3. Perugia, G.,** Rodríguez-Martín, D., Boladeras, M. D., Mallofré, A. C., Barakova, E., & Rauterberg, M. (2017, August). Electrodermal activity: explorations in the psychophysiology of engagement with social robots in dementia. In *2017 26th IEEE International Symposium on Robot and Human Interactive Communication (RO-MAN)* (pp. 1248-1254). IEEE.
- C2. Perugia, G.,** Díaz-Boladeras, M., Català-Mallofré, A., Rauterberg, M., & Barakova, E. (2017, July). Modelling engagement in dementia through behaviour. Contribution for socially interactive robotics. In *2017 International Conference on Rehabilitation Robotics (ICORR)* (pp. 1112-1117). IEEE.
- C1. Perugia, G.,** Díaz Boladeras, M., Barakova, E., Català Mallofré, A., & Rauterberg, M. (2017, March). Social hri for people with dementia: one size fits all?. In *Proceedings of the Companion of the 2017 ACM/IEEE International Conference on Human-Robot Interaction* (pp. 257-258).

WORKSHOP PAPER (PEER REVIEWED)

- W2.** Calvo-Barajas, N., Elgarf, M., Alves-Oliveira, P., **Perugia, G.,** Paiva, A., Peters, C., & Castellano, G. (2020) Should a Robot Promote or Prevent? Regulatory Processes for Stimulating Creativity in Children. In *ICSR Workshop on Creativity and Robotics 2020*.
- W1.** Calvo-Barajas, N., **Perugia, G.,** & Castellano, G. (2019, November). Effects of Robot Facial Expressions and Gender on Children's Perception of Trustworthiness in First Encounters. In *ICSR Workshop on Quality of Interaction in Socially Assistive Robots: QISAR 2019*.

OTHER: SUMMER SCHOOLS AND CONFERENCES (NOT PEER REVIEWED)

- O3. Perugia, G.,** Díaz-Boladeras, M., Català-Mallofré, A., Barakova, E., & Rauterberg, M. (2016, Sept.). A Measurement Framework for Engagement in Dementia. Database Collection. In *IEEE/EURASIP Summer School on Signal Processing, Semantics, and Media*

- O2.** **Perugia, G.**, Díaz-Boladeras, M., Català-Mallofré, A., Barakova, E., & Rauterberg, M. (2015, Aug). Distinguishing Apathy and Depression through their Behavioral Symptoms: The Role of Sensing Technologies. In *2015 ICESSE Interactive and Cognitive Environments Summer School*.
- O1.** **Perugia, G.**, Díaz-Boladeras, M., Català-Mallofré, A., (2015, June). ENGAGE: an Evidence-based Model of Engagement for Dementia. In *Actas de las XVII Jornadas de ARCA 2015*.