

PERSONAL INFORMATION

Eleonora Chitti

Nationality: Italian

Email: eleonora.chitti@unimi.it

Personal webpage: <https://elekit.github.io>

Google scholar: <https://scholar.google.com/citations?user=8v7yYykAAAAJ>

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Profile: Obtained a PhD in Computer Science at the University of Milan (28/11/2023), now Research Fellow at the University of Milan, Laboratory of Multimedia Interaction Perception Society (MIPS). Her research focuses on Human-Computer Interaction, particularly on serious games design to support physical and cognitive rehabilitation. She has participated in interdisciplinary projects in collaboration with clinicians and psychologists (e.g., AIRCA on human robot interaction to support social skills for children with autism spectrum condition; MiEmo for emotion recognition training in children with autism; XR-FOG for gait rehabilitation through mixed reality for people with Parkinson's disease). Adjunct Professor, Teaching assistant and thesis co-supervisor at the University of Milan, she co-delivers course in Virtual and Augmented Reality. Her work combines research and innovation in inclusive technologies.

WORK EXPERIENCE

Postdoc in Computer science

[12/2025 - Current]

Researcher at the Multimedia Interaction Perception Society MIPS at Department of Computer Science, University of Milan - UNIMI

[01/2026 - Current]

Adjunct Professor

Adjunct Professor for the course Teaching Workshop: Creation and New Technologies: Emotions, Images, and Performance at Department of Cultural and Environmental Heritage, University of Milan

[12/2023 - 11/2025]

Post-Doctoral Researcher (type B) at the Applied Intelligent System Laboratory, University of Milan

Project: AIRCA: Action Interaction between Humanoid Robots and Children with Autism Spectrum Conditions (ASC) within a social context

I'm contributing to this project to equip a NAO robotic agent with the ability to play different table games by reaching and grasping blocks, and to choose and modulate actions to maximize the involvement of the human partner in a joint action game scenario characterized by a sequence of complementary actions. The table games will be designed with clinical experts to support social skills training for children with autism Website: <https://airca.di.unimi.it>

[02/2019 - 10/2019]

Full Time Consultant with permanent contract at Sprint Reply

Sprint Reply

City: Milan - Country: Italy

I was consultant at Sprint Reply (part of the Reply, network of specialized companies) in the area of Artificial Intelligence, RPA development to automate business processes. I worked for Sprint as Consultant for business companies as Unipol, Sky Munich (Deutschland) for whom I lead for the first time a project and then Unicredit for whom I lead a project on AI process-automation. At the end of September 2019 I quit Consulting to start PhD studies because of my strong dedication to research.

EDUCATION AND TRAINING

[11/2019 - 11/2023]

PhD in Computer Science

Department of Computer Science, University of Milan - UNIMI

My topic involves research on Human Computer Interaction, focusing on serious games and exergames design to support physical and cognitive rehabilitation. My PhD thesis focused on design and development of MiEmo (formerly named Cocoon) a digital platform to help ASC children training on emotion recognition from face expressions. This research is the first to explore the effects of multimodal feedback of music pieces and coloured animations associated to the emotion portrayed on screen, to enhance emotion perception, advancing the state-of-the-art in assistive technologies for neurodiverse populations by addressing ASC children's needs integrating computer

science and psychological dimensions. PhD thesis available at:
<https://air.unimi.it/handle/2434/1015931>

- [03/2016 - 12/2018] **Master's degree in Computer Science and Engineering**
Polytechnic of Milan - POLIMI
- Final grade: 110/110
 - Thesis: Rehabilitation video games for young patients affected by epidermolysis bullosa
My thesis focused on the design of the V-Arcade serious-games framework to support upper limbs rehabilitation for children with epidermolysis bullosa.
<https://www.politesi.polimi.it/handle/10589/144748>

- [09/2012 - 02/2016] **Bachelor's degree in Computer Science and Engineering**
Polytechnic of Milan - POLIMI
- Final grade: 91/110
 - Thesis: Escape from the Aliens in the Outer Space Videogame Project

- [09/2007 - 07/2012] **High School Diploma**
High school qualification in Classical Studies at Liceo Classico Rinaldini of Ancona
- Final grade: 85/100

SEMINARS AND SUMMER SCHOOL

- [15-19 August 2022] ▪ Participant selected for the 4eu+ (European University Alliance) Summer school of Artificial Intelligence <https://iebil.di.unimi.it/SS4EUPlus22/index.html>

COURSES

- [2026- current] ▪ Adjunct Professor for Workshop: Creation and New Technologies: Emotions, Images, and Performance
- [2020- current] ▪ Teaching Assistant for the *Virtual Reality* course at University of Milan, Department of Computer Science
- [2022-2023] ▪ Teaching Assistant for the course *4EU+ Artificial Representation of Reality*.
- [2020-2021] ▪ Tutor for the *Advanced Intelligent Systems* course at University of Milan, Department of Computer Science

HONOURS AND AWARDS

- [2026] ▪ Awarded with a Seal of Excellence under the Horizon Europe Marie Skłodowska-Curie Actions MSCA Postdoctoral Global Fellowships 2025
- [2025] ▪ Awarded with a Seal of Excellence under the Horizon Europe Marie Skłodowska-Curie Actions MSCA Postdoctoral Global Fellowships 2024
- [2023] ▪ Winner of the contest “The stories we are” part of the *Economy of Francesco - The 25th hour World* event with the Video Game “The Last Drop”. For the creativity of the project used to bring younger people closer to ecological issues through an inclusive and accessible language, from a technical-scientific background. (<https://francescoeconomy.org/it/find-out-all-the-winning-works-of-the-eof-2023-contest/>)
- [2019-2023] ▪ PhD Scholarship from the Italian Government and the University of Milan. Highly competitive full scholarship by the Italian Ministry of Education and the University of Milan to pursue a PhD in Computer Science. The scholarship covered tuition fees and provided a monthly stipend, enabling to focus on my research in eHealth. This recognition facilitated participation in international conferences (online during Covid pandemic), significantly advancing research skills and network.
- [2022] ▪ Selected Participant, 4EU+ Summer School on Artificial Intelligence, University of Milan and 4EU+ (2022); chosen among a limited number of applicants for the highly competitive summer school on AI Advances in research.

- [2018] ▪ Finalist nominated for the 2018-2019 ETIC Award (AICA Italian Association for Informatics and Automatic Calculation) for the best master's degree theses on "Ethics and Information and Communication Technologies"
- [2017] ▪ Second place for the best Single Player video game during the New Game Designer 2017 contest at University of Milan (award video <https://youtu.be/Tiac0mneCrl>)
- [2017] ▪ Walk Lauretani Rosary Exhibition, from 8th of March to 1st of May 2017, organized by Pontifical Delegation for the Sanctuary of the Holy House of Loreto, Municipality of Loreto, Chamber of Commerce, Marche Region and MIBACT of Italian Ministry of Culture. I had the possibility to showcase a modern Rosary designed with a 3D printer in Loreto at Bastione Sangalli, as part of award of the Young Designers Ideas Competition.

PERSONAL SKILLS

Mother tongue(s) **Italiano**

Other language(s) **Proficient in English (C1)**

I also took the TOEFL certification in 2019 with scores:

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
C1	C1	B2	B2	B2
TOEFL total score 94 - B2				

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
[Common European Framework of Reference for Languages](#)

Communication skills

- good communication and tutoring skills gained through my experience as PhD student and previously as university student
- good communication and collaboration skills gained through my experience as a consultant

Organisational / managerial skills

- organizational skills gained during the PhD and university studies (to manage project's time and study) and during the experience as a consultant
- managerial skills gained through my experience as a consultant, and as student participating to projects

Other skills

- Modelling with Blender 3D
- piano playing (5 year study)
- art history and drawing

Programming languages

Good knowledge of

- C# (AND UNITY 3D)
- PYTHON
- JAVA
- HTML and JAVASCRIPT (THREE.JS, React)

Basic knowledge of

- VISUAL BASIC (AND UIPATH-RPA)
- C
- C++

PUBLICATIONS

Journal

- *Eleonora Chitti, Rossana Actis-Grosso, Paola Ricciardelli, Benedetta Olivari, Cecilia Carenzi, Mariantonia Tedoldi, N. Alberto Borghese, MiEmo: A multi-modal platform on emotion recognition for children with autism spectrum condition, Computers in Human Behavior Reports, Volume 17, 2025, <https://doi.org/10.1016/j.chbr.2024.100549>.*

Book Chapters

- N. Alberto Borghese, and Eleonora Chitti . (2025). *Reaching and Grasping with NAO Robot*. In: Palinko, O., et al. Social Robotics. ICSR + AI 2024. Lecture Notes in Computer Science, vol 15562. Springer, Singapore. https://doi.org/10.1007/978-981-96-3519-1_3
- N. Alberto Borghese, Francesca Ciardo, Eleonora Chitti, Raffaele Scuotto, Rossana Actis-Grosso, Filippo Cavallo, Laura Fiorini, Lorenzo Pugi, Benedetta Olivari, Maria Antonia Tedoldi, Cecilia Carenzi, Paola Ricciardelli. (2024). *AIRCA: Co-Design of Scenarios for Treating Autism Spectrum Condition with NAO Robot*. In: Fiorini, L., Sorrentino, A., Siciliano, P., Cavallo, F. (eds) Ambient Assisted Living. ForlìAAL 2024. Lecture Notes in Bioengineering. Springer, Cham. https://doi.org/10.1007/978-3-031-77318-1_2
- Chitti, E. et al. (2024). *Co-design of a Multi-modal Application for Emotion Recognition for Children with Autism Spectrum Condition*. In: Pons, J.L., Tornero, J., Akay, M. (eds) Converging Clinical and Engineering Research on Neurorehabilitation V. ICNR 2024. Biosystems & Biorobotics, vol 32. Springer, Cham. https://doi.org/10.1007/978-3-031-77584-0_120
- Brambilla, S., Boccignone, G., Borghese, N.A., Chitti, E., Lombardi, R., Ripamonti, L.A. (2023) *Tracing Stress and Arousal in Virtual Reality Games Using Players' Motor and Vocal Behaviour*. In: da Silva, H.P., Cipresso, P. (eds) Computer-Human Interaction Research and Applications. CHIR 2023. Communications in Computer and Information Science, vol 1996. Springer, Cham. https://doi.org/10.1007/978-3-031-49425-3_10 (candidate for best paper award)
- Pezzera, M., Chitti, E., Borghese, N.A. (2022). *Augmented Reality for Rehabilitation Tuning and Assessment*. In: Torricelli, D., Akay, M., Pons, J.L. (eds) Converging Clinical and Engineering Research on Neurorehabilitation IV. ICNR 2020. Biosystems & Biorobotics, vol 28. Springer, Cham. https://doi.org/10.1007/978-3-030-70316-5_69
- Chitti E., Pezzera M., Borghese N.A. (2021) *Multimodal Empathic Feedback Through a Virtual Character*. In: Del Bimbo A. et al. (eds) Pattern Recognition. ICPR International Workshops and Challenges. ICPR 2021. Lecture Notes in Computer Science, vol 12662. Springer, Cham. doi: 10.1007/978-3-030-68790-8_13

Conference Proceedings

- E. Chitti et al., "Co-Design of a Mixed Reality Application to Support Freezing of Gait Rehabilitation," 2025 IEEE Conference on Serious Games and Applications for Health (SeGAH), Manchester, United Kingdom, 2025, pp. 1-7, doi: 10.1109/SeGAH65397.2025.11168294.
- E. Carrer et al., "Etherea: a Video Game for Individuals With Motor Disabilities With Eye-Tracking-Based Interaction," 2025 IEEE Conference on Serious Games and Applications for Health (SeGAH), Manchester, United Kingdom, 2025, pp. 1-8, doi: 10.1109/SeGAH65397.2025.11168449.
- E. Chitti, P. Serrano and N. A. Borghese, "XR-FOG: A mixed reality approach to treat Freezing of Gait in patients with Parkinson's disease," 2024 IEEE 12th International Conference on Serious Games and Applications for Health (SeGAH), Funchal, Portugal, 2024, pp. 1-5, doi: 10.1109/SeGAH61285.2024.10639585.
- Eleonora Chitti, Riccardo Iervolino, and N. Alberto Borghese. 2024. *Exploring AR Experience with Thermojelly: a Competitive AR Board-game with Tangible Interfaces*. In Companion Proceedings of the 2024 Annual Symposium on Computer-Human Interaction in Play (CHI PLAY Companion '24). Association for Computing Machinery, New York, NY, USA, 37-42. <https://doi.org/10.1145/3665463.3678809>
- E. Chitti et al., (2022) *Evaluation of the V-Arcade serious games framework to support upper limbs rehabilitation at home for children with Juvenile Idiopathic Arthritis*. 2022 IEEE 10th International Conference on Serious Games and Applications for Health (SeGAH), 2022, pp. 1-8.
- E. Chitti et al., (2021) *V-Arcade: design and development of a serious games framework to support the upper limbs rehabilitation*. 2021 IEEE 9th International Conference on Serious Games and Applications for Health (SeGAH), 2021, pp. 1-8, doi: 10.1109/SEGAH52098.2021.9551858.
- Pezzera M., Chitti E., Borghese N.A., (2020) *MIRARTS: A mixed reality application to support postural rehabilitation*, IEEE 8th International Conference on Serious Games and Applications for Health (SeGAH), Vancouver, BC, Canada, 2020, pp. 1-7, doi: 10.1109/SeGAH49190.2020.9201694

Contribution in periodic of conference series

- E. Chitti, S. Cagiada, M. C. N. Rosa, A. Rizzi. Un gioco da tavolo narrativo per spostare l'attenzione dal dolore nei pazienti anziani. XX COLOR CONFERENCE of Italian Association of color 2025, in Colore e Colorimetria - Contributi multidisciplinari Vol. XX B, Research Culture And Science Books series (RCASB)
- Eleonora Chitti, Andrea Barbagallo, Andrea Delia, N. Alberto Borghese (2025). *ARnopoly: exploring strengths and weaknesses of AR experience enhancing board games (short paper)*. AlxHMI 2024 - 3rd Workshop on Artificial Intelligence for Human-Machine Interaction 2024, Bolzano, Italy. https://ceur-ws.org/Vol-3903/AlxHMI2024_paper5.pdf
- N. Alberto Borghese et al. *Co-design of scenarios for interacting with a NAO robot in treating autism spectrum condition*, AlxHMI 2024 - 3rd Workshop on Artificial Intelligence for Human-Machine Interaction 2024, Bolzano, Italy, <https://ceur-ws.org/Vol-3903>
- E. Chitti et al. (2022) *Development of a Multidimensional Digital Platform as a Support to Emotion Expression for Children with Autism Spectrum Disorders*. 2022 Alps Adria Psychology Conference AAPC2022 - <http://psiholoska-obzorja.si/en/article?id=566>

Paper submitted

- E. Chitti, D. A. Montereale, A. De Sandi, E. Mailland, L. Borrellini, F. Cogiamanian, D. Mellace, A. Marfoli, C. Campo, C. Manzoni, R. Ferrucci, N. A. Borghese "XR-FOG: A Mixed Reality Framework for Freezing of Gait Rehabilitation and Usability Evaluation" *ACM Transactions on Computing for Healthcare Journal - Special Issue on Human Centered Computing in Healthcare*, under evaluation.
- E. Chitti, *Deep Learning applied to Procedural Content Generation in 2D Video Games*, In: Labati D., Genovese A., Piuri V. (eds) 4EU+ International Workshop on Recent Advancements in Artificial Intelligence (4EU+IWAI), Milano University Press - paper accepted
- Lorenzo Pugi, Laura Fiorini, Gabriele Buttari, Nunzio Alberto Borghese, Francesca Ciardo, Paola Ricciardelli, Rossana Actis-Grosso, Eleonora Chitti, Raffaele Simone Scuotto and Filippo Cavallo, *How are you feeling? Design and testing emotional dictionary for NAO robot to be used with children*. IX Congress of the National Group of Bioengineering (GNB) 2025 - paper accepted
- Francesca Ciardo, Raffaele Simone Scuotto, Rossana Actis-Grosso, Nunzio Alberto Borghese, Eleonora Chitti, Filippo Cavallo, Laura Fiorini, Lorenzo Pugi, Benedetta Olivari, Mariantonio Tedoldi and Paola Ricciardelli, *AIRCA training - An experimental study to evaluate the efficacy of humanoid training for social behaviour in Autism Spectrum Condition (ASC) children*. INTERNATIONAL CONFERENCE ON CHILD ROBOT INTERACTION, UNIVERSITY OF MILANO-BICOCCA, MILAN, JUNE 18-20 2025 - abstract accepted

Invited speaker:

OTHER INFORMATION

- 06/09/2024 Invited Speaker at AI Health Technology & Innovation Conference organized by the Santa Clara County Medical Association in San Jose (Hybrid event Online and In Presence)
- 20/06/2025 Speaker at Milan Workshop on Computational Methods for Mental Health and Well Being 2025, University of Milan-Bicocca, Milan, Italy

Editorial Activity:

Program Committee

2023 - Today	Member of the Program Committee of IEEE Serious Games for Health - SEGAH International Conference
2025	Member of the Program Committee of CIBB2025 - Computational Intelligence methods for Bioinformatics and Biostatistics
2025	Member of the Program Committee of XIII Congreso Iberoamericano de Tecnologías de Apoyo a la Discapacidad IBERDISCAP2025

2025	Member of the Program Committee of International Conference on Graphics and Interaction ICGI 2025
2025 - Today	Associate Chair of Work in Progress Track at ACM Annual Symposium on Computer-Human Interaction in Play (CHI PLAY)

Reviewer Activity

2022 – Today	Reviewer for Journal PACMHCI, GAMES track in which are published Full Papers of the Chi- Play Annual Symposium on Computer-Human Interaction in Play
2022 – Today	Reviewer for IEEE Access Journal
2023 – Today	Reviewer for IEEE Serious Games for Health - SEGAH International Conference
2024 – Today	Reviewer for IEEE International Conference on Games - COG
2024 – Today	Reviewer for IEEE International Conference on Robot and Human Interactive Communication - ROMAN
2024 – Today	Reviewer for IEEE International Conference on Intelligent Robots and Systems - IROS
2024 – Today	Reviewer for International Conference on Neurorehabilitation - ICNR
2025 - Today	Reviewer for IEEE Transactions on Games Journal
2025- Today	Reviewer for ACM Transactions on Computing for Healthcare
2025 - Today	Reviewer for Research Culture And Science Books series (RCASB), Gruppo del Colore – Italian Association of Colors
2025	Reviewer for International Conference on Graphics and Interaction ICGI 2025
2025- Today	Reviewer for Conference on Computational Intelligence methods for Bioinformatics and Biostatistics (CIBB)
2025	Reviewer for Congreso Iberoamericano de Tecnologías de Apoyo a la Discapacidad IBERDISCAP

Thesis supervision

2021 – Today	Supervision of 9 Master's thesis in LM-18 Computer Science at University of Milan Supervision of 3 Bachelor's thesis in L-31 Computer Science at University of Milan
2018 – 2019	Tutor for a Bachelor's thesis in L-SNT2 Physiotherapy at Department of Health Sciences, School of Medicine, University of Eastern Piedmont (Italy) within V-Arcade project for upper limbs rehabilitation for children with <i>Juvenile Idiopathic Arthritis</i>

External Advisory Board

28/08/2025	Joined AGILidades' External Advisory Board. AGILidades is a health-tech company (Spin Off of the Polytechnic of Leiria, Portugal) that combines the neuroscience of ageing with game design, developing innovative mobile application and interactive physical games to assess and improve cognition and well-being in senior population.
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ANNEXES

Personal information

I authorize the handling of personal information in this curriculum, according to D.Lgs n. 196/03 and following

modifications and Regulations EU 679/2016 (General Regulations concerning Data Protection or GRDP) and art. 7 of University Regulations concerning protection of personal information.

Date

January 2026