

## Publications

2020

### *Conference Papers*

Micol Spitale, Franca Garzotto (2020). Towards Empathic Conversational Interaction. *To appear in International Conference on Conversational User Interfaces CUI20.*

Fabio Catania, Micol Spitale, Giulia Cosentino and Franca Garzotto (2020). What is the Best Action for Children to "Wake Up" and "Put to Sleep" a conversational agent? A Multi-Criteria Decision Analysis Approach. *To appear in International Conference on Conversational User Interfaces CUI20.*

Emanuele Torelli, Ibahim E. Shemy, Silvia Silleresi, Lukasz Moskwa, Giulia Cosentino and Franca Garzotto, "Do You Speak Holo? A Mixed Reality Application for Foreign Language Learning in Children with Language Disorders," In *2020 IEEE Conference on Virtual Reality and 3D User Interfaces Abstracts and Workshops (VRW)*, Atlanta, GA, USA, 2020, pp. 609-610, doi: 10.1109/VRW50115.2020.00155.

Francesco Vona, Emanuele Torelli, Eleonora Beccaluva and Franca Garzotto. (2020). Exploring the Potential of Speech-based Virtual Assistants in Mixed Reality Applications for People with Cognitive Disabilities. *In Proceedings of the 2020 International Conference on Advanced Virtual Interfaces (AVI '20)*. ACM, New York, NY, USA, 9 pages. <https://doi.org/10.1145/3399715.3399845>

Fabio Catania, Giorgio De Luca, Nicola Bombaci, Erica Colombo, Pietro Crovari, Eleonora Beccaluva, and Franca Garzotto (2020). Musical and Conversational Artificial Intelligence. *In Proceedings of the 25th International Conference on Intelligent User Interfaces Companion*, pp. 51-52. 2020.

Pietro Crovari, Fabio Catania, and Franca Garzotto (2020). Crime Story as a Tool for Scientific and Technological Outreach. *In Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems*, pp. 1-10. 2020.

Pietro Crovari, Fabio Catania, Micol Spitale, Franca Garzotto (2020). Ecological Momentary Assessment Tools: Lessons Learned from an HCI Perspective. *22nd International Conference on Human-Computer Interaction, 2020.*

Pietro Crovari, Fabio Catania, Pinoli, Roytburg, Salzar, Garzotto, Ceri. OK, DNA!: A Conversational Interface to Explore Genomic Data. In *International Conference on Conversational User Interfaces (CUI2020)*.

Eleonora Aida Beccaluva, Antonio Chiappetta, Julian Cuellar Mangut, Luca Molteni, Marco Mores, Daniele Occhiuto, Franca Garzotto (2020). Deception of the "Elephant in the Room": Invisible Auditing Multi-Party Conversations to Support Caregivers in Cognitive Behavioral Group Therapies. *To appear in HCI International 2020.*

Franca Garzotto, Eleonora Beccaluva, Mattia Gianotti, Fabiano Riccardi. (2020). Interactive Multisensory Environments for Primary School Children. *In Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems*.

Arnone, O., Colombo, V., Cosentino, G., Riccardi, F., Beccaluva, E., Garzotto, F. (2020). Smart Buckets: An Interactive Interface Enabling Sensory Integration. *Interaction Design and Children (IDC 2020)*, ACM. *To appear in IDC 2020*.

Cutrupi, C.M., Fadda, S., Valcarengi, G., Cosentino, G., Catania, F., Spitale, M. (2020). Smemo: a Multi-modal Interface Promoting Children's Creation of Personal Conversational Agents Interfaces. *ACM International Conference on Conversational User Interfaces (CUI 2020)*, ACM. *To appear in IDC 2020*.

Micol Spitale, Fabio Catania, Pietro Crovari, Franca Garzotto. Multicriteria Decision Analysis and Conversational Agents for children with autism. *To appear in Annual Hawaii International Conference on System Sciences 2020 (HICCS 2020)*.

Micol Spitale, Silvia Silleresi, Giulia Cosentino, Francesca Panzeri & Franca Garzotto (2020). "Whom would you like to talk with?" Exploring Conversational Agents for Children's Linguistic Assessment. *In Interaction Design and Children (IDC '20)*, June 21–24, 2020, London, United Kingdom. ACM, New York, NY, USA.  
<https://doi.org/10.1145/3392063.3394421>

Giulia Cosentino, Mattia Gianotti, Mirko Gelsomini, Franca Garzotto, Venanzio Arquilla (2020). Perform the Magic! Usability testing for Magika, a Multisensory Environment fostering children's well being. *Full Paper at 3rd International Conference on Environmental Design 2019 MDA Mediterranean Design Association*.

Mirko Gelsomini, Giulia Leonardi, Franca Garzotto (2020). Embodied Learning in Immersive Smart Spaces. *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems*

Fabio Catania, Giorgio De Luca, Nicola Bombaci, Erica Colombo, Pietro Crovari, Eleonora Beccaluva, and Franca Garzotto (2020). Musical and Conversational Artificial Intelligence. *In Proceedings of the 25th International Conference on Intelligent User Interfaces Companion (IUI '20)*. Association for Computing Machinery, New York, NY, USA, 51–52. DOI:<https://doi.org/10.1145/3379336.3381479>

Fabio Catania (2020). Conversational Technology and Natural Language Visualization for Children's Learning. *In Extended Abstracts of the 2020 CHI Conference on Human Factors in Computing Systems (CHI EA '20)*. Association for Computing Machinery, New York, NY, USA, 1–7. DOI:<https://doi.org/10.1145/3334480.3375041>

### *Journal Articles*

Silvia Silleresi, Philippe Prévost, Racha Zebib, Frédérique Bonnet-Brilhault, Donatello Conte & Laurice Tuller (2020). Identifying language and cognitive profiles in children with ASD

via a cluster analysis exploration: implications for the new ICD-11. (1), 1-13. *Autism Research, international Society for Autism Research, Wiley.*

Silvia Silleresi, Laurice Tuller, Helene Delage, Stephanie Durrleman, Frédérique Bonnet-Brilhault, Joelle Malvy & Philippe Prévost (2018). Sentence repetition and language impairment in French-speaking children with ASD. *In On the Acquisition of the Syntax of Romance Language, Anna Gavarro (eds.). pp: 235-258. Acquisition and Language Disorders. John Benjamins, Amsterdam.*

#### *Book*

Maria Teresa Guasti, Silvia Silleresi & Mirta Vernice (2019). *Imparare la lingua giocando. L'educazione multilingue da 0 a 6 anni.* Raffaello Cortina Editore. Milano.

## **2019**

#### *Conference Paper*

Fabio Catania, Micol Spitale, Davide Fisicaro. (2019). CORK: A CONversational agent framewoRK exploiting both rational and emotional intelligence. *In IUI Workshops.*

Fabio Catania. 2019. Conversational technology and affective computing for cognitive disability. *In Proceedings of the 24th International Conference on Intelligent User Interfaces: Companion (IUI '19). Association for Computing Machinery, New York, NY, USA, 153–154.* DOI:<https://doi.org/10.1145/3308557.3308723>

Catania, F., Beccaluva, E., & Garzotto, F. (2019). The Conversational Agent “Emoty” Perceived by People with Neurodevelopmental Disorders: Is It a Human or a Machine?. *In International Workshop on Chatbot Research and Design* (pp. 65-78). Springer, Cham.

Fabio Catania, Pietro Crovari, Micol Spitale and Franca Garzotto (2019). Automatic Speech Recognition: Do Emotions Matter?. *In 2019 IEEE International Conference on Conversational Data & Knowledge Engineering (CDKE), San Diego, CA, USA, 2019, pp. 9-16,* doi: 10.1109/CDKE46621.2019.00009.

Fabio Catania, Franca Garzotto, Daniele Occhiuto (2019). Emoty: an Emotionally Sensitive Conversational Agent for People with Neurodevelopmental Disorder. *In Proceedings IEEE Hawaii International Conference on System Sciences (HICSS).*

Aurora Constantin, Jessica Korte, Jerry Alan Fails, Judith Good, Cristina Adriana Alexandru, Mihaela Dragomir, Helen Pain, Juan Pablo Hourcade, Eva Eriksson, Annalu Waller, and Franca Garzotto. Pushing the Boundaries of Participatory Design with Children with Special Needs. *In Proceedings of the 18th ACM International Conference on Interaction Design and Children (IDC '19). ACM, New York, NY, USA, 697-705.* DOI: <https://doi.org/10.1145/3311927.3325165>

Juan Pablo Hourcade, Alissa N. Antle, Michail Giannakos, Jerry Alan Fails, Janet C. Read, Panos Markopoulos, Franca Garzotto, and Andrea Palumbos. Child-Computer Interaction SIG: Designing for Refugee Children. *In Extended Abstracts of the 2019 CHI Conference on*

*Human Factors in Computing Systems (CHI EA '19)*. ACM, New York, NY, USA, Paper SIG10, 4 pages. DOI: <https://doi.org/10.1145/3290607.3311760>

Mirko Gelsomini, Giulia Cosentino, Micol Spitale, Mattia Gianotti, Davide Fisicaro, Giulia Leonardi, Fabiano Riccardi, Agnese Piselli, Eleonora Beccaluva, Barbara Bonadies, Lucia Di Terlizzi, Martino Zinzone, Shanti Alberti, Christelle Rebourg, Marina Carulli, Franca Garzotto, Venanzio Arquilla, Mario Bisson, Barbara Del Curto, and Monica Bordegoni. Magika, a Multisensory Environment for Play, Education and Inclusion. In *Extended Abstracts of the 2019 CHI Conference on Human Factors in Computing Systems (CHI EA '19)*. ACM, New York, NY, USA, Paper LBW0277, 6 pages. DOI: <https://doi.org/10.1145/3290607.3312753>

Micol Spitale, Fabio Catania, Giulia Cosentino, Mirko Gelsomini, and Franca Garzotto (2019). WIYE: building a corpus of children's audio and video recordings with a story-based app. In *Proceedings of the 24th International Conference on Intelligent User Interfaces: Companion (IUI '19)*. ACM, New York, NY, USA, 33-34. DOI: <https://doi.org/10.1145/3308557.3308684>

Giulia Cosentino, Giulia Leonardi, Mirko Gelsomini, Micol Spitale, Mattia Gianotti, Franca Garzotto, and Venanzio Arquilla. (2019). GENIEL: an auto-generative intelligent interface to empower learning in a multi-sensory environment. In *Proceedings of the 24th International Conference on Intelligent User Interfaces: Companion (IUI '19)*. ACM, New York, NY, USA, 27-28. DOI: <https://doi.org/10.1145/3308557.3308685>

Mirko Gelsomini, Micol Spitale, Eleonora Beccaluva, Leonardo Viola, and Franca Garzotto. (2019). Reflex: adaptive learning beyond the screen. In *Proceedings of the 24th International Conference on Intelligent User Interfaces: Companion (IUI '19)*. ACM, New York, NY, USA, 29-30. DOI: <https://doi.org/10.1145/3308557.3308689>

Amirreza Rouhi, Micol Spitale, Fabio Catania, Giulia Cosentino, Mirko Gelsomini, and Franca Garzotto. (2019). Emotify: emotional game for children with autism spectrum disorder based-on machine learning. In *Proceedings of the 24th International Conference on Intelligent User Interfaces: Companion (IUI '19)*. ACM, New York, NY, USA, 31-32. DOI: <https://doi.org/10.1145/3308557.3308688>

Davide Fisicaro, Franca Garzotto, Mirko Gelsomini, and Francesco Pozzi. (2019). ELE - A Conversational Social Robot for Persons with Neuro-Developmental Disorders. In *Proceedings of Human-Computer Interaction – INTERACT 2019 - 17th IFIP TC 13 International Conference, Springer Lecture Notes in Computer Science*.

Micol Spitale, Mirko Gelsomini, Eleonora Beccaluva, Leonardo Viola, and Franca Garzotto. (2019). Meeting the needs of people with Neuro-Developmental Disorder through a phygital approach. In *Proceedings of ACM CHIItaly '19, Padova, Italy, September 23–25, 2019*. DOI: <https://doi.org/10.1145/3351995.3352055>

Pietro Crovari, Mattia Gianotti, Fabiano Riccardi, Franca Garzotto (2019). Designing a Smart Toy: guidelines from the experience with Smart Dolphin “SAM” In *Proceedings of ACM CHIItaly '19, Padova, Italy, September 23–25, 2019, 12 pages*. DOI: <https://doi.org/10.1145/3351995.3352041>

Mirko Gelsomini, Micol Spitale, Eleonora Beccaluva, Leonardo Viola, and Franca Garzotto. (2019). Reflex: adaptive learning beyond the screen. *In Proceedings of the 24th International Conference on Intelligent User Interfaces: Companion (IUI '19)*. ACM, New York, NY, USA, 29-30. DOI: <https://doi.org/10.1145/3308557.3308689>

Franca Garzotto, Mirko Gelsomini, Nicolo' Messina, Vito Matarazzo, Daniele Occhiuto (2019). Designing Wearable Immersive “Social Stories” for Persons with Neurodevelopmental Disorder. *In Proc. HCI International – The 20th International Conference on Human Computer Interaction – pp. 517-529, Springer LNCS* [https://doi.org/10.1007/978-3-319-92049-8\\_37](https://doi.org/10.1007/978-3-319-92049-8_37)

Davide Fisicaro, Franca Garzotto, Mirko Gelsomini, and Francesco Pozzi (2019). ELE - A Conversational Social Robot for Persons with Neuro-Developmental Disorders *In Proceedings of Human-Computer Interaction – INTERACT 2019 - 17th IFIP TC 13 International Conference, Springer Lecture Notes in Computer Science*

Franca Garzotto, Vito Matarazzo, Nicolò Messina, Mirko Gelsomini and Carlo Riva (2019). Improving Museum Accessibility through Storytelling in Wearable Immersive Virtual Reality. *In Proceedings of IEEE Digital Heritage*

#### *Journal Paper*

Juan Pablo Hourcade, Alissa N. Antle, Michail Giannakos, Janet C. Read, Panos Markopoulos, Franca Garzotto, and Andrea Palumbos (2019). Designing for Uprooted Children: Issues, Challenges and Opportunities. *In ACM Interactions*.

Franca Garzotto (2019). Interactive Smart Spaces: New directions for Inclusive Education? *In Frontier in Psychology – section: Educational Psychology. Special Issue on “New Educational Technologies and Their Impact on Students' Well-being and Inclusion Process: Insights from Italy”*.

Beatrice Aruanno and Franca Garzotto (2019). MemHolo: Mixed Reality Experiences for Subjects with Alzheimer’s Disease. *Multimedia Tools and Applications* 78 (10), 13517-13537

#### *Book chapter*

Franca Garzotto (2019). Designing Interactive Multisensory Smart Spaces. In “Environmental Design, Multisensory Experience, Innovative Interaction Technology and Sensorial Perception” (eds. Bisson M. et al.) *Springer Series in Design and Innovation* (to appear)