

Curriculum Vitae

Surname / Name **Merylin Monaro**

Outline and research interests

My research interests are mainly in the field of **cognitive psychology**, with particular attention to the application of new technologies to study cognitive processes. One of the most enigmatic and complex aspects of cognition concerns lying. During my academic career, I focused on the study of deception. I integrate the psychology knowledge with notions of AI to develop **intelligent lie detection and memory detection** machines mostly based on the analysis of the interaction between humans and machines.

I am deepening several research lines that contextualize lies in different scenarios. For example, I studied the deception about identity and its implications in terms of security, both physical and virtual (e.g., on the internet). An issue related to deception in the online environment concerns fake reviews, a phenomenon that has a great economic impact. Another area where lie detection is crucial is legal context. Particularly, I studied the phenomenon of **malinger**, or the fabrication, feigning, or exaggeration of physical or psychological symptoms designed to achieve the desired outcome (for example, claim compensation, justify work absence, avoid jail, etc.). My scientific works are aimed to develop new tools to detect malingering in the most simulated syndromes (whiplash, depression, cognitive impairment, amnesia, etc.) using new technologies (e.g., mouse tracking, eye tracking) and integrating data analysis techniques based on **machine learning**. Another relevant topic is faking good: using **behavioural measures (RT, mouse tracking)** and machine learning models, we studied how to detect people who **fake good in personality questionnaires**.

More generally, I am interested in the **application of Artificial Intelligence** and cutting-edge technologies (e.g., **Virtual Reality, Augmented Reality, automated facial expression recognition, eye tracking, mouse and keystroke analysis**) to study the human mind and behaviour. More recently, I started to work on **cognitive abilities of LLMs** and on issues such as **AI explainability and fairness**.

Qualifications

Date May 2021 – May 2030

Qualification **Abilitazione Scientifica Nazionale (ASN) Settore Concorsuale PSIC-01 (ex 11/E1) - II Fascia**

Date January 2015 – now

Qualification **Qualified psychologist and psychotherapist** (psicologo abilitato iscritto all' "Ordine degli Psicologi del Veneto", n° 9336).

I have practiced as psychologist and psychotherapist in the following fields:

- Counselling and psychotherapy
- Neuropsychology (neuropsychological assessment and rehabilitation)
- Forensic psychology (expert witness in civil and criminal trials: psychiatric infirmity, psychic damage, custody, child abuse, ability to testify, etc.)

Current position

Date July 2022 – now

Position **Assistant Professor (Ricercatore a Tempo Determinato di tipo A, RTD-A)** at Department of General Psychology, University of Padova.

Past positions

Date	April 2022 – July 2022
Position	Research fellowship (borsista di ricerca) at Human Inspired Technology Research Centre, University of Padova, for the project “Hybrid Sustainable Worlds”, funded by POR FESR 2014-2020 , action 1.1.4 DGR 822/2020. I worked on the use of mixed reality to study human decision making in the marketing field.
Date	December 2021 – March 2022
Position	Research fellowship (borsista di ricerca) at Human Inspired Technology Research Centre, University of Padova, for the project “Hybrid Sustainable Worlds”, funded by POR FESR 2014-2020 , action 1.1.4 DGR 822/2020. I worked on the use of augmented reality to study human decision making in the marketing field.
Date	July 2021 – August 2021
Position	Research fellowship (borsista di ricerca) at Department of Mathematics, University of Padova. I worked on the project “ Usability Study of the Explainable-AI functionalities in a Process Mining Software Tool ”.
Date	July 2018 – July 2021
Position	Post-doctoral research fellow (assegnista di ricerca) at Department of General Psychology, University of Padova. The position is funded by the European Union’s Horizon 2020 research and innovation programme under the project “Back-UP: Personalised Prognostic Models to Improve Well-being and Return to Work After Neck and Low Back Pain”, project No 777090. I worked on developing a machine learning algorithm to detect whiplash malingering based on behavioural indicators .
Date	March 2018 – June 2018
Position	External research collaborator (co.co.co) at Human Inspired Technology Research Centre, University of Padova, for the project “Visual Music”, funded by the European Union’s Horizon 2020 research and innovation programme under grant agreement No 731986.
Date	November 2014 – October 2017
Position	PhD candidate in Brain, Mind and Computer Science, University of Padova.
Date	April 2013 – November 2014
Position	Graduate student researcher at BrainCare srl.

Scientific publications

Metrics on March 25th, 2025

Scopus Number of publications = 62
 Citations = 1202
 H-index = 17

Scholar Citations = 1909
 H-index = 23

List of publications

Papers (*=first author, *=first authorship shared, **=second author, #=last author, @=corresponding author, §=publication independent from supervisor, ^=international collaboration)

1. Loconte R., Battaglini C., Maldera S., Pietrini P., Sartori G., Navarin N., Monaro M. (2025). Detecting Deception Through Linguistic Cues: From Reality Monitoring to Natural Language Processing. *Journal of Language and Social Psychology*. Doi: 10.1177/0261927X251316883 #
2. Fietta V., Rizzi S., De Luca C., Gios L., Pavesi M.C., Gabrielli S., Monaro M., Forti S. (2024). A Chatbot-Based Version of the World Health Organization–Validated Self-Help Plus Intervention for Stress Management: Co-Design and Usability Testing. *JMIR Hum Factors*, 11:e64614. Doi: 10.2196/64614 §
3. Loconte R., Kleinberg B., Monaro M. (2024). Which methods for the assessment of Large Language Models (LLM)? Comments on the usage of a neuropsychological approach and the development of psychometrics of LLMs | Quali metodi per la valutazione dei Large Language Models (LLM)? Riflessioni sull'uso di un approccio neuropsicologico e sullo sviluppo di una psicometria dei LLM. *Giornale Italiano di Psicologia*, 51(3), 579–584. Doi: 10.1421/114432 #§^
4. Mazza C., Ceccato I., Cannito L., Monaro M., Ricci E., Bartolini E., Cardinale A., Di Crosta A., Cardaioli M., La Malva P., Colasanti M., Tambelli R., Giromini L., Palumbo R., Palumbo R., Di Domenico A., Roma P. (2024). A Step Forward in Identifying Socially Desirable Respondents: An Integrated Machine Learning Model Considering T-scores, Response Time, Kinematic Indicators, and Eye Movements. *Human Behaviour and Emerging Technologies*. Doi: 10.1155/2024/7267030 §
5. Fietta V., Franco M., De Santis E., Monaro M., Palazzi C.E., Gaggi O. (2024). Safe Digital Teens: an App to Address Technology-Related Risks for Adolescents. *GoodIT '24: Proceedings of the 2024 International Conference on Information Technology for Social Good*, pp. 333-341. Doi: 10.1145/3677525.3678679 §
6. Monaro M., Mazza C., Colasanti M., Colicino E., Bosco F., Ricci E., Biondi S., Rossi M., Roma P. (2024). Testing memory of a VR environment: comparison with the real environment and 2D pictures. *Virtual Reality* 28(2), 100. Doi: 10.1007/s10055-024-00999-w *†@§^
7. Colasanti M., Melis G., Monaro M., Ricci E., Bosco F., Rossi M., Biondi S., Verrocchio M.C., Di Domenico A., Mazza C., Roma P. (2024). Did you commit a crime there? Investigating the visual exploration patterns of guilty, innocent, honest and dishonest subjects when viewing a complex mock crime scene. *Journal of Nonverbal Behavior*, 48(1), 47–71. Doi: 10.1007/s10919-023-00438-5 §
8. Ricci E., Colasanti M., Monaro M., Mazza C., Cardinale A., Bosco F., Mazzoni G., Arnaud C.R., Ferracuti S., Di Domenico A., Roma P. (2023). How to Distinguish Feigned from Genuine Depressive Symptoms: Response Patterns and Content Analysis of the SIMS Affective Disorder Scale. *Psychological Injury and Law*, 16, pp. 237–248. Doi: 10.1007/s12207-023-09481-5 §
9. Fietta V., Navarin N., Monaro M., Gaggi O. (2023). Women and Gender Disparities in Computer Science: A Case Study at the University of Padua. *GoodIT '23: Proceedings of the 2023 ACM Conference on Information Technology for Social Good*, pp. 82–91. Doi: 10.1145/3582515.3609521 §
10. Orso V., Campanini M.L., Pierobon L., Portello G., Monaro M., Bettelli A., Gamberini G. (2023). Exploiting 3D Web to Enhance Online Shopping: Toward an Update of Usability Heuristics. In: Nah, F., Siau, K. (eds) *HCI in Business, Government and Organizations. HCII 2023. Lecture Notes in Computer Science*, vol. 14038. Doi: 10.1007/978-3-031-35969-9_30 §
11. De Biasio A., Monaro M., Oneto L., Ballan L., Navarin N. (2023). On the problem of recommendation for sensitive users and influential items: Simultaneously maintaining interest and diversity. *Knowledge-Based Systems*, vol. 275, 110699. Doi: 10.1016/j.knsys.2023.110699 **§
12. Orrù G., Ordali E., Monaro M., Scarpazza C., Conversano C., Pietrini P., Gemignani A., Sartori G. (2023). Reconstructing individual responses to direct questions: a new method for reconstructing malingered responses. *Frontiers in Psychology*, 14:1093854. Doi:

13. Fietta V., Bertoldo F., Gasperi L., Mazza C., Roma P., Monaro M. (2023). Mental Healthcare Workers: An Italian Study to Improve Work Sustainability during Emergency Situations. *Sustainability*, 15(4), 3214. Doi: 10.3390/su15043214 §#
14. Flesia L., Monaro M., Jannini E.A., Limoncin E. (2023). "I'm Too Old for That": The Role of Ageism and Sexual Dysfunctional Beliefs in Sexual Health in a Sample of Heterosexual and LGB Older Adults: A Pilot Study. *Healthcare*, 11(4), 459. Doi: 10.3390/healthcare11040459 §**
15. Galanti R., de Leoni M., Monaro M., Navarin N., Marazzi A., Di Stasi B., Maldera S. (2023). An explainable decision support system for predictive process analytics. *Engineering Applications of Artificial Intelligence*, Vol. 120, 105904. Doi: 10.1016/j.engappai.2023.105904 §
16. Flesia L., Adeeb M., Waseem A., Helmy M., Monaro M. (2023). Psychological Distress Related to the COVID-19 Pandemic: The Protective Role of Hope. *European Journal of Investigation in Health, Psychology and Education*, 13(1), 67-80. Doi: 10.3390/ejihpe13010005 #§^
17. Orrù G., De Marchi B., Sartori G., Gemignani A., Scarpazza C., Monaro M., Mazza C., Roma P. (2023). Machine learning item selection for short scale construction: A proof-of-concept using the SIMS. *The Clinical Neuropsychologist*, 37(7). Doi: 10.1080/13854046.2022.2114548
18. Orso V., Portello G., Pierobon L., Bettelli A., Monaro M., Gamberini G. (2022). Rethinking the shopping experience: a qualitative explorative study on 3D web and AR for displaying and selling goods. *16th International Conference on Interfaces and Human Computer Interaction, IHCI 2022, and 15th International Conference on Game and Entertainment Technologies 2022, GET 2022 - Held at the 16th Multi Conference on Computer Science and Information Systems, MCCSIS 2022*, pp. 142-148. ISBN (Book): 978-989-8704-41-2 §
19. Monaro M., Fietta V., Currò V., Lusetti G., Sartori G., Navarin N. (2022). Forged handwriting verification: a public domain dataset for training machine learning models. *2022 International Joint Conference on Neural Networks (IJCNN)*, pp. 1-8. Doi: 10.1109/IJCNN55064.2022.9891973 *@
20. Cardaioli M., Miolla A., Conti M., Sartori G., Monaro M., Scarpazza C., Navarin N. (2022). Face the Truth: Interpretable Emotion Genuineness Detection. *2022 International Joint Conference on Neural Networks (IJCNN)*, pp. 01-08. Doi: 10.1109/IJCNN55064.2022.9892298
21. Monaro M., Barakova E., Navarin N. (2022). Editorial Special Issue Interaction With Artificial Intelligence Systems: New Human-Centered Perspectives and Challenges. *IEEE Transactions on Human-Machine Systems*, vol. 52, no. 3, pp. 326-331. Doi: 10.1109/THMS.2022.3172516. *@§^
22. Monaro M., Maldera S., Scarpazza C., Sartori G., Navarin N. (2022). Detecting deception through facial expressions in a dataset of videotaped interviews: A comparison between human judges and machine learning models. *Computers in Human Behavior*, 127, 107063. Doi: 10.1016/j.chb.2021.107063 *@
23. Fietta V., Zecchinato F., Di Stasi B., Polato M., Monaro M. (2021). Dissociation between Users' Explicit and Implicit Attitudes towards Artificial Intelligence: An Experimental Study. *IEEE Transactions on Human-Machine Systems*, vol. 52, no. 3, pp. 481-489. Doi: 10.1109/THMS.2021.3125280 #@@§
24. Cardaioli M., Cecconello S., Monaro M., Sartori G., Conti M., Orrù G. (2021). Malingering Scraper: A novel framework to reconstruct honest profiles from malingering psychopathological tests. In: Mantoro T., Lee M., Ayu M.A., Wong K.W., Hidayanto A.N. (eds) *Neural Information Processing. ICONIP 2021. Communications in Computer and Information Science*, vol 1517. Springer, Cham. Doi: 10.1007/978-3-030-92310-5_50
25. Zhao E., Xia D., Greenhalgh M., Colicino E., Monaro M., Hitching R., Harris O., Adamson M.M. (2021). Combining international survey datasets to identify indicators of stress during the COVID-19 pandemic: A machine learning approach to improve generalization. *COVID*, 1(4), 728-738. Doi: 10.3390/covid1040058 §^

26. Balbuena L., Monaro M. (2021). Fear of infection and the common good: COVID-19 and the first Italian lockdown. *Int. J. Environ. Res. Public Health*, 18(21), 11341. Doi: 10.3390/ijerph182111341 #§^
27. Flesia L., Fietta V., Foresta C., Monaro M. (2021). The Relationship between Drugs Consumption and Dating App Use: Results from an Italian Survey. *Social Sciences*, 10(8), 290. Doi: 10.3390/socsci10080290 #§
28. Flesia L., Fietta V., Foresta C., Monaro M. (2021). What are you looking for?" The role of motives for installing dating apps in the association between dating app use and sexual risk behaviors. *Sexual Medicine*, 9(4):100405. Doi: 10.1016/j.esxm.2021.100405 #§
29. Flesia L., Fietta V., Foresta C., Monaro M. (2021). The Association between Dating Apps and Alcohol Consumption in an Italian Sample of Active Users, Former Users, and Non-Users. *Social Sciences*, 10(7), 249. Doi: 10.3390/socsci10070249 #§
30. Flesia L., Fietta V., Foresta C., Monaro M. (2021). Cigarette Smoking and Dating App Use: Findings from a Survey in a Sample of Adults in Italy. *European Journal of Investigation in Health, Psychology and Education*, 11(2):557-569. Doi: 10.3390/ejihpe11020040 #§
31. Monaro M., Baydal-Bertomeu JM., Zecchinato F., Fietta V., Sartori G., De Rosario H. (2021). The detection of malingering in whiplash-related injuries: a targeted literature review of the available strategies. *International Journal of Legal Medicine*, 135, 2017–2032. Doi: 10.1007/s00414-021-02589-w *@^
32. Monaro M., De Rosario H., Baydal-Bertomeu JM., Bernal-Lafuente M., Masiero S., Macía-Calvo M., Cantele F., Sartori G. (2021). A model to differentiate WAD patients and people with abnormal pain behaviour based on biomechanical and self-reported tests. *International Journal of Legal Medicine*, 135, 1637–1646. Doi: 10.1007/s00414-021-02572-5 *@^
33. Cardaioli M., Kaliyar P., Capuozzo P., Conti M., Sartori G., Monaro M. (2021). Predicting Twitter Users' Political Orientation: An Application to the Italian Political Scenario. 2020 *IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining (ASONAM)*, The Hague, Netherlands, 2020, pp. 159-165. Doi: 10.1109/ASONAM49781.2020.9381470 #
34. Monaro M., Negri P., Zecchinato F., Gamberini L., Sartori G. (2021). Mouse Tracking IAT in Customer Research: An Investigation of Users' Implicit Attitudes Towards Social Networks. In: Russo D., Ahram T., Karwowski W., Di Bucchianico G., Taiar R. (eds) *Intelligent Human Systems Integration 2021. IHSI 2021. Advances in Intelligent Systems and Computing*, vol 1322. Springer, Cham. Doi: 10.1007/978-3-030-68017-6_102 *@
35. Scarpazza C., Finos L., Genon S., Masiero L., Bortolato E., Cavaliere C., Pezzaioli J., Monaro M., Navarin N., Battaglia U., Pietrini P., Ferracuti S., Sartori G., Camperio Ciani A.S. (2021). Idiopathic and acquired pedophilia as two distinct disorders: an insight from neuroimaging. *Brain Imaging and Behavior*, 15, 2681–2692. Doi: 10.1007/s11682-020-00442-z
36. Monaro M., Mazza C., Colasanti M., Ferracuti S., Orrù G., Di Domenico A., Sartori G., Roma P. (2021). Detecting faking-good response style in personality questionnaires with four choice alternatives. *Psychological Research*, 85, 2474–2482. Doi: 10.1007/s00426-020-01473-3 *†@
37. Orrù G., Mazza C., Monaro M., Ferracuti S., Sartori G., Roma P. (2021). The Development of a Short Version of the SIMS Using Machine Learning to Detect Feigning in Forensic Assessment. *Psychol. Inj. and Law* 14, 46-57. Doi: 10.1007/s12207-020-09389-4
38. Biondi S., Mazza C., Orrù G., Monaro M., Ferracuti S., Ricci E., Di Domenico A., Roma P. (2020) Interrogative suggestibility in the elderly. *PLoS ONE* 15(11), e0241353. Doi: 10.1371/journal.pone.0241353 §
39. Roma P., Monaro M., Colasanti M., Ricci E., Biondi S., Di Domenico A., Verrocchio M.C., Napoli C., Ferracuti S., Mazza C. (2020). A 2-Month Follow-Up Study of Psychological Distress among Italian People during the COVID-19 Lockdown. *Int. J. Environ. Res. Public Health* 17, 8180. Doi: 10.3390/ijerph17218180 **§

40. Roma P., Monaro M., Muzi L., Colasanti M., Ricci E., Biondi S., Napoli C., Ferracuti S., Mazza C. (2020). How to Improve Compliance with Protective Health Measures during the COVID-19 Outbreak: Testing a Moderated Mediation Model and Machine Learning Algorithms. *Int. J. Environ. Res. Public Health*, 17, 7252. Doi: 10.3390/ijerph17197252 **§
41. Flesia L., Monaro M., Mazza C., Fietta V., Colicino E., Segatto B., Roma P. (2020). Predicting Perceived Stress Related to the Covid-19 Outbreak through Stable Psychological Traits and Machine Learning Models. *J. Clin. Med.*, 9, 3350. Doi: 10.3390/jcm9103350 *†@§^ (*†=first authorship shared)
42. Monaro M., Zampieri I., Sartori G., Pietrini P., Orrù G. (2020). The detection of faked identity using unexpected questions and choice reaction times. *Psychological Research*, 85(6), 2474-2482. Doi: 10.1007/s00426-020-01410-4 *†@
43. Monaro M., Cannonito E., Gamberini L., Sartori G. (2020). Spotting Faked 5 Stars Ratings in E-Commerce Using Mouse Dynamics. *Computers in Human Behavior* 109, 106348. Doi: 10.1016/j.chb.2020.106348 *@
44. Mazza C., Monaro M., Burla F., Colasanti M., Orrù G., Ferracuti S., Roma P. (2020). Use of mouse-tracking software to detect faking-good behavior on personality questionnaires: an explorative study. *Scientific Reports* 10, 4835. Doi: 10.1038/s41598-020-61636-5 *†§ (*†=first authorship shared)
45. Cardaioli M., Monaro M., Sartori G., Conti M. (2020). Detecting identity deception in online context: a practical approach based on keystroke dynamics. In: Corradini I., Nardelli E., Ahram T. (eds) *Advances in Human Factors in Cybersecurity. AHFE 2020. Advances in Intelligent Systems and Computing*, vol 1219. Springer, Cham. Doi: 10.1007/978-3-030-52581-1_6 **
46. Monaro M., Capuozzo P., Ragucci F., Maffei A., Curci A., Scarpazza C., Angrilli A., Sartori G. (2020). Using blink rate to detect deception: a study to validate an automatic blink detector and a new dataset of videos from liars and truth-tellers. In: Kurosu M. (eds) *Human-Computer Interaction. Human Values and Quality of Life. HCII 2020. Lecture Notes in Computer Science*, vol 12183. Springer, Cham. Doi: 10.1007/978-3-030-49065-2_35 *@
47. Orrù G., Monaro M., Conversano C., Gemignani A., Sartori G. (2020). Machine learning in psychometrics and psychological research. *Front. Psychol.* 10:2970. Doi: 10.3389/fpsyg.2019.02970 **
48. Mazza C., Orrù G., Burla F., Monaro M., Ferracuti S., Colasanti M., Roma P. (2019). Indicators to distinguish symptom accentuators from symptom producers in individuals with a diagnosed adjustment disorder: A pilot study on inconsistency subtypes using SIMS and MMPI-2-RF. *PLoS ONE* 14(12): e0227113. Doi: 10.1371/journal.pone.0227113 §
49. Zago S., Piacquadio E., Monaro M., Orrù G., Sampaolo E., Difonzo T., Toncini A., Heinzl E. (2019). The Detection of Malingered Amnesia: An Approach Involving Multiple Strategies in a Mock Crime. *Front. Psychiatry* 10:424. Doi: 10.3389/fpsyg.2019.00424 §
50. Pace G., Orrù G., Monaro M., Gnoato F., Vitaliani R., Boone K.B., Gemignani A., Sartori G. (2019). Malingering Detection of Cognitive Impairment With the b Test Is Boosted Using Machine Learning. *Front. Psychol.* 10:1650. Doi: 10.3389/fpsyg.2019.01650
51. Mazza C., Monaro M., Orrù G., Burla F., Colasanti M., Ferracuti S., Roma P. (2019) Introducing Machine Learning to Detect Personality Faking-Good in a Male Sample: A New Model Based on Minnesota Multiphasic Personality Inventory-2 Restructured Form Scales and Reaction Times. *Front. Psychiatry* 10:389. Doi: 10.3389/fpsyg.2019.00389 **§
52. Ciancone Chama A.G., Monaro M., Piccoli E., Gamberini L., Spagnolli A. (2019). Engaging the Audience with Biased News: An Exploratory Study on Prejudice and Engagement. In: Oinas-Kukkonen H., Win K., Karapanos E., Karppinen P., Kyza E. (eds) *Persuasive Technology*:

Development of Persuasive and Behavior Change Support Systems. PERSUASIVE 2019. *Lecture Notes in Computer Science*, vol 11433. Springer, Cham. Doi: 10.1007/978-3-030-17287-9_28 **§

53. Monaro M., Businaro M., Spolaor R., Li Q.Q., Conti M., Gamberini L., Sartori G. (2019). The Online Identity Detection via Keyboard Dynamics. In: Arai K., Bhatia R., Kapoor S. (eds) Proceedings of the Future Technologies Conference (FTC) 2018. FTC 2018. *Advances in Intelligent Systems and Computing*, vol 881. Springer, Cham. Doi: 10.1007/978-3-030-02683-7_24 *@
54. Monaro M., Gamberini L., Sartori G. (2018). Spotting faked identities via mouse dynamics using complex questions. Proceedings of the 32nd International BCS Human Computer Interaction Conference (HCI 2018), 8. Doi: 10.14236/ewic/HCI2018.8 *@
55. Monaro M., Toncini A., Ferracuti S., Tessari G., Vaccaro M.G., De Fazio P., Pigato G., Meneghel T., Scarpazza C., Sartori G. (2018). The Detection of Malingering: A New Tool to Identify Made-Up Depression. *Front. Psychiatry* 9:249. Doi: 10.3389/fpsyt.2018.00249 *
56. Monaro M., Gamberini L., Zecchinato F., Sartori G. (2018). False identity detection using complex sentences. *Front. Psychol.* 9:283. Doi: 10.3389/fpsyg.2018.00283 *
57. Monaro M., Galante C., Spolaor R., Li Q.Q., Gamberini L., Conti M., Sartori G. (2018). Covert lie detection using keyboard dynamics. *Scientific Reports* 8, 1976. Doi: 10.1038/s41598-018-20462-6 *
58. Spolaor R., Monaro M., Capuozzo P., Baesso M., Conti M., Gamberini L., Sartori G., (2018). You Are How You Play: Authenticating Mobile Users via Game Playing. In: Baldi M., Quaglia E., Tomasin S. (eds) Proceedings of the 2nd Workshop on Communication Security. WCS 2017. *Lecture Notes in Electrical Engineering*, vol 447. Springer, Cham. Doi: 10.1007/978-3-319-59265-7_6 **
59. Monaro M., Gamberini L., Sartori G. (2017). The detection of faked identity using unexpected questions and mouse dynamics. *PLoS ONE* 12(5): e0177851. Doi: 10.1371/journal.pone.0177851 *
60. Monaro M., Fugazza F.I., Gamberini L., Sartori G. (2017). How Human-Mouse Interaction can Accurately Detect Faked Responses About Identity. In: Gamberini L., Spagnoli A., Jacucci G., Blankertz B., Freeman J. (eds) Symbiotic Interaction. Symbiotic 2016. *Lecture Notes in Computer Science*, vol 9961. Springer, Cham. Doi: 10.1007/978-3-319-57753-1_10 *
61. Monaro M., Spolaor R., Li QQ., Conti M., Gamberini L., Sartori G. (2017). Type Me the Truth! Detecting Deceitful Users via Keystroke Dynamics. Proceedings of the 12th International Conference on Availability, Reliability and Security (ARES '17). *ACM International Conference Proceeding Series*, Volume Part F130521, 60. Doi: 10.1145/3098954.3104047 *
62. Monaro M., Gamberini L., Sartori G. (2017). Identity Verification Using a Kinematic Memory Detection Technique. In: Hale K., Stanney K. (eds) Advances in Neuroergonomics and Cognitive Engineering. *Advances in Intelligent Systems and Computing*, vol 488. Springer, Cham. Doi: 10.1007/978-3-319-41691-5_11 *@
63. Spolaor R., Li QQ., Monaro M., Conti M., Gamberini L., Sartori G. (2016). Biometric Authentication Methods on Smartphones: A Survey. *PsychNology Journal*, 14 (2-3), 87-98.

Contributions in books and monographs

1. Roma P., Monaro M., Mazza C. (2022). COVID-19 Outbreak and Beyond: Psychological and Behavioral Responses and Future Perspectives. ISBN 978-3-0365-3015-4 (Hbk); ISBN 978-3-0365-3014-7 (PDF). Doi: 10.3390/books978-3-0365-3014-7
2. Monaro M. (2020). L'Implicit Association Test (IAT). In: Le tecnologie e le metodologie di ricerca e analisi. In: Garofalo C., Gallucci F., Diotto M. (eds) *Manuale di Neuromarketing*. Associazione Italiana di Neuromarketing. Hoepli Editore. ISBN: 9788820398767
3. Sartori G., Zangrossi A., Monaro M. (2018). Deception Detection With Behavioral Methods: The

Autobiographical Implicit Association Test, Concealed Information Test–Reaction Time, Mouse Dynamics, and Keystroke Dynamics. In: J. P. Rosenfeld. (eds) *Detecting Concealed Information and Deception*. Elsevier Inc. Doi: 10.1016/B978-0-12-812729-2.00010-0

4. Sartori G., Zangrossi A., Orrù G., Monaro M. (2017). Detection of Malingering in Psychic Damage Ascertainment. In: Ferrara S. (eds) *P5 Medicine and Justice*. Springer, Cham. Doi: 10.1007/978-3-319-67092-8_21
5. Cantagallo A., Monaro M. (2014). Ausili per il compenso e ausili per il recupero intrinseco. In: Cantagallo A., Mancuso M. (eds.) *La tecnologia in aiuto alla persona con disturbi neuropsicologici: tele riabilitazione e ausili*. FrancoAngeli Editore. ISBN: 9788820476229

Abstracts

Abstract: Menghini L., Monaro M., Gamberini L. *Towards the Italian adaptation of the Work-Related Rumination Scale: Development and psychometrics*. ACCEPTED at 22nd European Congress of Work and Organisational Psychology (EAWOP 2025), Prague, 21-24 May 2025.

Abstract: Menghini L., Monaro M., Gamberini L. (2024). *Sleep quality and workers' mental health in the digital transition era*. Journal of sleep research, vol 33.

Abstract: Riccardo L., Sartori G., Monaro M. *Comparing Human and GPT-4 Performance in Scoring Genuine and Deceptive Memory Reports for Credibility Assessments*. E-Book - Conference Abstracts EAPL 2024, Caparica, 9-12 July 2024.

Abstract: Fietta V., Rizzi S., Gios L., De Luca C., Pavesi M.C., Monaro M., Gabrielli S. *Towards a Virtual Stress Management Coach App: A Co-Design Protocol*. Abstract Book – European Conference on Digital Psychology, 21-22 March 2024.

Abstract: Fietta V., Rizzi S., Gios L., Pavesi M.C., De Luca C., Gabrielli S., Monaro M., Navarin N., Mayora O., Forti S. *Interventi psicologici erogati da assistenti virtuali per promuovere il benessere mentale*. Proceedings of 3rd Italian congress of third generation cognitive-behavioural psychotherapies, 19-20 October 2023.

Abstract: Monaro M., Silla L., Donghi G., Palazzi C., Gaggi O., Navarin N. (2023). *Detection of simple and complex deceptions through automatic facial micro-expression analysis: open challenges for Artificial Intelligence*. Contemporary Psychology. Journal for psychodiagnostics theory, practice and other fields of psychology, Vol. 26, Supp. 1, p.28.

Abstract: Mazza C., Ceccato I., Cannito L., Monaro M., Ricci E., Bartolini E., Colasanti M., Di Crosta A., Cardaioli M., Cardinale A., La Malva P., Palumbo R., Giromini L., Palumbo R., Di Domenico A., Roma P. (2023). *An Integrated Machine Learning Model Considering T-Scores, Response Time, Kinematic Indicators, and Eye Movements in Identifying Socially Desirable Responding*. Contemporary Psychology. Journal for psychodiagnostics theory, practice and other fields of psychology, Vol. 26, Supp. 1, p.25.

Abstract: Monaro M., Silla L., Donghi G., Palazzi C., Gaggi O., Navarin N. (2023). *Detection of simple and complex deceptions through automatic facial micro-expression analysis: open challenges for Artificial Intelligence*. Contemporary Psychology. Journal for psychodiagnostics theory, practice and other fields of psychology, Vol. 26, Supp. 1.

Abstract: Monaro M., Loconte R., Maldera S., Battaglini C., Pietrini P., Sartori G. (2023). *Are humans bad evaluators or poor decision-makers in detecting verbal indicators of deception? A Human vs Machine experiment*. Proceedings of XXIII National Congress Italian Psychological Association Clinical and Dynamic Section, Florence, 14-17 September 2023.

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Abstract: Bosco F. Biondi S., Ricci E., Colasanti M., Mazza C., Melis G., Monaro M., Di Domenico A., Roma P. (2023). *Did You Commit a Crime There? Investigating the Visual Exploration Patterns when Viewing a Complex Mock Crime Scene: A Comparison Between Guilty vs. Innocent and Honest vs.*

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Abstract: Roma P., Colasanti M., Di Domenico A., Monaro M. (2023). *Behavioral indicators to detect faking-good response style*. International Journal of Psychology, vol. 58, 96.

Abstract: Colasanti M., Ricci E., Mazza C., Bosco F., Monaro M., Ferracuti S., Verrocchio M.C., Roma P. (2023). *Does SIMS Affective Disorder (AF) Scale Actually Measure What It States It Measures? An Empirical Investigation to Distinguish Feigned Depression from Genuine Patients*. Annual Conference of the European Association of Psychology and Law, Cluj-Napoca, RO, July 4th-7th, 2023.

Abstract: Bettelli A., Gamberini L., Orso V., Monaro M., Pierobon L., Martinez G.O., Porto L., Campanini M.L., Portello G. (2023). *Novel technologies to enhance resiliency: the Hybrid and Sustainable Worlds Project*. 21st European Association of Work and Organizational Psychology (EAWOP) 2023 Congress, Katowice, PL, May 24th-27th, 2023.

Abstract: Monaro M., Melis G., Sartori G. (2022). *Reconstructing honest responses from malingered ones: a machine learning application to psychological testing*. Proceedings of XXX National Congress Italian Psychological Association, Padova, 27-30 September 2022, symposium session.

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Abstract: Limoncin E., Flesia L., Monaro, M. (2022). *Can self-perceived and socially based dysfunctional beliefs about ageing bear on sexual activity and sexual satisfaction of elderly people? A comparison between heterosexual and homosexual men and women*. Proceedings of XXX National Congress Italian Psychological Association, Padova, 27-30 September 2022, symposium session.

Abstract: Zhao E., Xia D., Greenhalgh M., Colicino E., Monaro M., Hitching R., Harris O., Adamson M.M. (2021). *Combining international survey datasets to identify indicators of stress during the COVID-19 pandemic: A machine learning approach to improve generalization*. European Psychiatry, Volume 65, Special Issue S1: Abstracts of the 30th European Congress of Psychiatry, Budapest, 4-7 June 2022. Doi: 10.1192/j.eurpsy.2022.951

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Abstract: Miolla A., Cardaioli M., Scarpazza C., Monaro M., Navarin N., Sartori G. (2021). *Words lie, your face doesn't*. Neuroethics: New Ways of Investigating the Brain. 12th International Scientific Conference on Neuroethics and 7th Conference of the Italian Society for Neuroethics (SINe-INS 2021), 13-21 May 2020. ONLINE CONFERENCE TO COVID-19.

Abstract: Roma P., Colasanti M., Di Domenico A., Monaro M. (2020). *Behavioral indicators to detect faking-good response style*. ACCEPTED TO the 32nd International Congress of Psychology (ICP), Prague, 19-24 July 2020. CONFERENCE POSTPONED TO 2021 DUE TO COVID-19.

Abstract: De Rosario H., Monaro M., Maciá M., Sartori G., Medina-Ripoll E. (2020). *Integrity assessment in whiplash associated disorders using biomechanical tests and self-reported symptoms*. ACCEPTED TO ESBiomech 2020, Milan, 12-15 July 2020. CONFERENCE CANCELED DUE TO COVID-19.

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Abstract: Scarpazza C., Monaro M., Orrù G., Sartori G. (2019). *L'analisi cinematografica come strumento per rilevare simulazione e dissimulazione in ambito forense*. Book of abstracts del IV Convegno Nazionale di Psicologia Giuridica, symposium: la valutazione del danno biologico di natura psichica in ambito forense: metodologia e approcci evidence-based nell'assessment di adulti e minori", Roma,

ITALY, November 7th-9th, 2019.

Abstract: Monaro M., Orrù G., Mazza C. (2019). Mouse tracking: a tool to detect fake good and fake bad behaviours. *Mediterranean Journal of Clinical Psychology*, Vol. 7, N. 2, Suppl. 2019. Proceedings of XXI National Congress Italian Psychological Association Clinical and Dynamic Section, Milan, 27-29 September 2019, symposium session. ISSN 2282-1619.

Abstract: Baroni M., Cesari V., Monaro M., Conversano C., Ciacchini R., Marchi L., Marzetti F., Scotto J., Miccoli M., Gemignani A., Orrù G. (2019). Clinical application of tdc on motor symptoms in Parkinson's disease: a literature review. *Mediterranean Journal of Clinical Psychology*, Vol. 7, N. 2, Suppl. 2019. Proceedings of XXI National Congress Italian Psychological Association Clinical and Dynamic Section, Milan, 27-29 September 2019, poster session. ISSN 2282-1619.

Abstract: Monaro M., Sartori G. (2018). The lie detection in the online environment. *International Journal of Psychophysiology* 131, S26. Part of special issue: Proceedings of the 19th World Congress of Psychophysiology (IOP 2018) of the International Organization of Psychophysiology (IOP) Lucca, Italy September 4th to 8th 2018. Doi: 10.1016/j.ijpsycho.2018.07.082

Abstract: Sartori G., Orrù G., Monaro M. (2016). Detecting deception through kinematic analysis of hand movement. *International Journal of Psychophysiology*, 108, 16. Part of special issue: Proceedings of the 18th World Congress of Psychophysiology (IOP2016) of the International Organization of Psychophysiology (IOP) Havana, Cuba August 31st to September 4th, 2016. Doi: 10.1016/j.ijpsycho.2016.07.056

Abstract: Monaro M., Agosta S., Cantagallo A., Sartori G. (2014). Implicit recovery of autobiographical memory in patients with neurological global amnesia: a study with the autobiographical Implicit Association Test. *Annals of Physical and Rehabilitation Medicine* 57, suppl.1, e143. Part of special issue: 19th European Congress of Physical and Rehabilitation Medicine, Marseille, 26-31 May 2014. Doi: 10.1016/j.rehab.2014.03.1591

Abstract: Martini A., Monaro M., Woudsma J.S., Cantagallo A. (2014). Fit-to-drive after stroke and traumatic brain injury: a combination of performances in cognitive tests and driving simulator. *Annals of Physical and Rehabilitation Medicine* 57, suppl.1, e25. Part of special issue: 19th European Congress of Physical and Rehabilitation Medicine, Marseille, 26-31 May 2014. Doi: 10.1016/j.rehab.2014.03.090

Posters

Fietta V., Monaro M., Navarin N., Kelders S., Gabrielli S. (2025). *Do attitudes towards technology mediate engagement with digital mental health interventions?* ACCEPTED at 14th Supporting Health by Technology Conference, 10-11 June 2025 – Enschede (Netherlands).

Fietta V., Navarin N., Bressanelli S., Sartori G., Monaro M. (2025). *Artificial Intelligence and Handwriting Analysis: A Study on Gender and Sexual Orientation Identification through Machine Learning Algorithms*. ACCEPTED at Neuroethics 2025, 23-25 April 2025 – Munich (Germany).

Melis G., Sartori G., Monaro M., Scarpazza C., Orrù G. (2025). *Beyond Instructions? Exploring Free Will in Artificial Intelligence*. ACCEPTED at Neuroethics 2025, 23-25 April 2025 – Munich (Germany).

Melis G., Sartori G., Monaro M. (2024). *Uncovering Drug Use Using Mouse Kinematics: Validity Assessment Through Symptom Sentence Analysis*. Presented at the 7^o European Conference on Symptom Validity Assessment (SVA), 10-11 October 2024 – Polignano (Italy).

Menghini L., Monaro M., Gamberini L. (2024). *Sleep quality and workers' mental health in the digital transition era*. Presented at 27th Congress of the European Sleep Research Society (ESRS), 24-28 September 2024 – Seville (Spain).

Loconte R., Maldera S., Battaglini C., Pietrini P., Sartori G., Navarin N., Monaro M. (2024). *Detecting Deceptive Narratives through NLP: Comparing Theory-driven and Data-driven Approaches*. Presented at AI4H conference - Artificial Intelligence for Healthcare, 21-22 March 2024 – Padova (Italy).

Fietta V., Rizzi S., Gios L., De Luca C., Pavesi M.C., Monaro M., Gabrielli S. *Towards a Virtual Stress*

Management Coach App: A Co-Design Protocol. Presented at Second European Conference of Digital Psychology: Psychology and AI: New Horizons, 21-22 March 2024 – Digital Conference.

Fietta V., Rizzi S., Gios L., Pavesi M.C., De Luca C., Gabrielli S., Monaro M., Navarin N., Mayora O., Forti S. *Interventi psicologici erogati da assistenti virtuali per promuovere il benessere mentale*. Presented at 3rd Italian congress of third generation cognitive-behavioural psychotherapies, 19-20 October 2023 – Milano (Italy).

Monaro M., Fietta V., Currò V., Lusetti G., Sartori G., Navarin N. *Forged handwriting verification: a public domain dataset for training machine learning models*. Presented at the IEEE World Congress on Computational Intelligence (WCCI 2022), International Joint Conference on Neural Networks (IJCNN 2022) track, 18-23 July 2022 - Padova (Italy).

Monaro M. *Spotting 5 Stars Faked Ratings in E-Commerce Using Mouse Dynamics*. Presented at “Brains Meet Digital Enterprises”, 22 October 2019 - Padova (Italy).

Baroni M., Cesari V., Monaro M., Conversano C., Ciacchini R., Marchi L., Marzetti F., Scotto J., Miccoli M., Gemignani A., Orrù G. *Clinical application of tdcS on motor symptoms in Parkinson's disease: a literature review*. Presented at the XXI National Congress Italian Psychological Association Clinical and Dynamic Section, 27-29 September 2019 - Milano (Italy).

Porreca A., Sacchi C., Monaro M. *Observing parenting through computer vision: can a multi-person body detection system predict the quality of parent-child interactions?* Presented at “Brains Meet Digital Enterprises”, 25 October 2018 - Padova (Italy).

Capuozzo P., Zangrossi A., Monaro M., Sartori G. *Increasing cognitive load through the cumulative effect of a double lie in the detection of false identity*. Presented at the congress “Reading the Deceptive Brain and Mind”, 16-18 March 2017 - Lucca (Italy).

Monaro M., Toncini A., Sartori G. *The detection of malingering: a new tool to spot made-up depression*. Presented at the congress “Reading the Deceptive Brain and Mind”, 16-18 March 2017 - Lucca (Italy).

Toncini A., Monaro M., Sartori G. *La rilevazione della simulazione in ambito clinico: presentazione di un nuovo strumento per la rilevazione automatica della depressione simulata*. Presented at the congress “Terapie psicologiche per ansia e depressione: costi e benefici”, 18-19 November 2016 - Padova (Italy).

Spolaor R., Li QQ., Monaro M., Conti M., Gamberini L., Sartori G. *Biometric Authentication Methods on Smartphones: A Survey*. Presented at the conference “Symbiotic 2016”, 29-30 September 2016 - Padova (Italy).

Monaro M., Agosta S., Cantagallo A., Sartori G. *Implicit recovery of autobiographical memory in patients with neurological global amnesia: a study with the autobiographical Implicit Association Test*. Presented at the 19th European Congress of Physical and Rehabilitation Medicine, 26-31 May 2014 - Marseille (France).

Martini A., Monaro M., Woudsma J.S., Cantagallo A. *Fit-to-drive after stroke and traumatic brain injury: a combination of performances in cognitive tests and driving simulator*. Presented at the 19th European Congress of Physical and Rehabilitation Medicine, 26-31 May 2014 - Marseille (France).

Monaro M., Del Giudice F., Cantagallo A., Stablum F. *Rehabilitation of executive disorders using a strategic life-simulation game: The Sims*. Presented at the 19th European Congress of Physical and Rehabilitation Medicine, 26-31 May 2014 - Marseille (France).

Computer skills

Software for experiments: E-prime, MouseTracker, Qualtrics, RealEye

Software for statistical analysis: SPSS, R Studio, JASP

Software for machine learning analysis: WEKA

Language skills

Mother tongue

Other Languages

Self assessment
European level ()*

English

German

Programming languages: R, Python

Italian

Comprehension				Spoken				Written	
Listening		Reading		Oral interaction		Speaking			
C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user
A1	Basic User	A1	Basic User	A1	Basic User	A1	Basic User	A1	Basic User

(*) [*Common European Framework of Reference \(CEF\) level*](#)

Autorizzo al trattamento dei miei dati personali ai sensi del D.L. 30 giugno 2003 n. 196 e successive modificazioni e ai sensi dell'art. 13 del Regolamento UE 2016/679.

Padova, 10.04.2025