Curriculum Vitae

Personal Data

Surname / Name | **Merylin Monaro**

Address

Phone

E-mail

Outline and research interests

My research interests are mainly in the field of social psychology, with particular attention to social cognition and the interaction with technological aspects (e.g., social networks). One of the most enigmatic and complex aspects of social cognition concerns lying. During my academic career, I focused on the study of deception and its social implications. I integrate the psychology knowledge with notions of AI to develop intelligent lie 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 social security, both physical and virtual (e.g., in social networks). An issue related to deception in the online environment concerns fake reviews, a phenomenon that has a great economical impact. Another area where lying causes important social and economic damage is the legal context. Particularly, I studied the phenomenon of malingering, 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. Some of my works concern a more subtle form of lying, due to the phenomenon of social desirability, which leads people to fake good to obtain an advantage (e.g., during work interviews to obtain a high responsibility job, to obtain child custody). Using behavioural measures (RT, mouse tracking) and machine learning models, we studied how to detect people who fake good in personality questionnaires.

A more recent research line regards the study of the consequences of using social networks, specifically dating apps. More generally, I am interested in human-computer interaction and in the study of usability and user experience related to new technologies. For example, we developed a new method of biometric authentication on smartphones. More interestingly, I am working on the study of users' explicit and implicit attitudes towards artificial intelligence and on new human-centred perspectives and challenges about the human interaction with artificial intelligence systems.

Finally, I published some papers concerning other classical social psychology topics: implicit attitudes and Implicit Association Test, prejudice, political orientation, compliance to social regulations.

Qualifications

Date | May 2021 – May 2030

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

Date | January 2015 – now

Qualification	**Qualified psychologist** (psicologo abilitato iscritto all' "Ordine degli Psicologi del Veneto", n° 9336). I practice 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	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 **nanomarketing in augmented realities.**

Past positions

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.
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.

Education and training

Date	November 2014 – October 2017 (Thesis defended on 23rd April 2018)
Qualification	**PhD cum laude in Brain, Mind and Computer Science – Curriculum in Neuroscience, Technology and Society – at Human Inspired Technology Research Centre (University of Padova)** **Thesis: "Lie detection in the future: the online lie detection via human-computer interaction".** Supervisor: prof. Giuseppe Sartori. Co-supervisor: prof. Mauro Conti.

Training activities	During my 3-years PhD I studied the cognitive processes and human behavior relating new technologies, with several applications in the field of security. I was involved in designing lie-detection tools to covert detection of deception for a wide range of applications. To detect deception, we used implicit measures arising from the interaction between the user and the device that he is using, as well as keystroke dynamics and mouse tracking. We built machine learning models to automatically detect faked information.
Date	January 2014 – December 2017
Qualification	**Specialization School in Psychotherapy** at Scuola Lombarda di Psicoterapia (SLOP) with a cognitive-behavioural and neuropsychological approach. Mark: 70/70
Date	July 2014 – July 2017
Qualification	**Course of high specialization in Forensic Psychology** at Scuola Lombarda di Psicoterapia (SLOP). Course units: Family and Childs (2014), Civil area (2105), Criminal psychology (2016), Penal area (2017).
Date	May 2013 – April 2014
Qualification	Internship at the Laboratory of Forensic Psychology in Department of General Psychology (University of Padova) under the supervision of Prof. Giuseppe Sartori.
Training activities	I was committed in various activities regarding forensic neuropsychology: analysis of clinical and legal documents, drafting of technical advice about instances of administration support, cancellation of acts for cognitive incapacity, circumvention of incapable person, psychiatric infirmity, psychic damage, custody, child abuse, ability to testify; test subministration, neuropsychological relations for driving license.
Date	April 2013
Qualification	**Master's Degree** in Clinical Psychology at Padova University. Thesis: "Implicit recovery of autobiographical memory in patients with neurological global amnesia: a study with the Autobiographical Implicit Association Test" Supervisor: prof. Giuseppe Sartori. Co-supervisor: prof.ssa Anna Cantagallo. Degree mark: 110 cum laude.
Date	October 2011 – August 2012
Qualification	Internship at BrainCare srl under the supervision of Anna Cantagallo, MD.
Training activities	I was involved in neuropsychological assessment and rehabilitation of patients with CNS damage by participating in both administration and interpretation of neuropsychological tests, writing reports and implementing treatment plans.
Date	August 2011
Qualification	Training at Neuropsychological Rehabilitation Unit in Rehabilitation Hospital "San Giorgio" in Ferrara under the supervision of Anna Cantagallo, MD.
Training activities	I was involved in neuropsychological assessment and rehabilitation of patients with CNS damage by participating in both administration and interpretation of neuropsychological tests, writing reports and implementing treatment plans.
Date	October 2010 – June 2011
Qualification	Stage at the Laboratory of Forensic Psychology in Department of General Psychology (University of Padova) under the supervision of Prof. Giuseppe Sartori.
Training activities	I was committed in various activities regarding forensic neuropsychology: analysis of clinical and legal

documents, drafting of technical advice about instances of administration support, cancellation of acts for cognitive incapacity, circumvention of incapable person and neuropsychological examinations of the driving license.

Date	October 2010
Qualification	**Bachelor's Degree** in Psychological, Cognitive and Psychobiological Sciences at Padova University.
	Thesis: "Early diagnosis in frontotemporal dementia patients: tests for a correct cognitive function's assessment". Supervisor: prof.ssa Franca Stablum. Degree mark: 110 cum laude.
Date	March 2010 – August 2010
Qualification	Internship at Department of Neuroscience (Padova University Hospital).
Training activities	I was involved in neuropsychological assessment of patients with Alzheimer's disease and other degenerative pathologies of the CNS.

Research visitings

Date	23th September 2021 – 8th October 2021
Qualification	**Visiting researcher at the Department of Human Neuroscience, Sapienza Università di Roma, in collaboration with the research group of Prof. Paolo Roma.**
Activities	I designed a study examining the spatial memory of subjects in Virtual Reality vs. 2D images vs. real environment. We also tested the deception processes after the exposition to these three different environments.
Date	1st June 2017 – 31st August 2017
Qualification	**Visiting PhD student at the Social Cognitive and Neural Sciences Lab (New York University, USA) under the supervision of Prof. Jonathan B. Freeman.**
Activities	I conducted studies examining the interplay of social identity and group processes with deception using mouse-tracking.

Scientific publications

Metrics on March 15th, 2022

Scopus Number of publications = 42
Citations = 466
H-index = 12

Scholar Citations = 705
H-index = 14

List of publications

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

1. 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 *@

2. 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. Doi: 10.1109/THMS.2021.3125280 #@§

3. Cardaioli M., Cecconello S., Monaro M., Sartori G., Conti M., Orrù G. (2021). Malingering Scraper: A novel framework to reconstruct honest profiles from malingerer 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

4. 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 §

5. 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 #§

6. 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 #§

7. 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 #§

8. 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 #§

9. 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 #§

10. 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 *@

11. 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 *@

12. 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 #

13. 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 *@

14. 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

15. 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: 0.1007/s00426-020-01473-3 *†@

16. 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

17. 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 §

18. 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 **§

19. 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 **§

20. 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 *†@§

21. 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 *†@

22. 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 *@

23. 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 *†§

24. 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 **

25. 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 *@

26. 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 **

27. 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 §

28. 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/fpsyt.2019.00424 §

29. 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

30. 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/fpsyt.2019.00389 **§

31. 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 **§

32. 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 *@

33. 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 *@

34. 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 *

35. 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 *

36. 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 *

37. 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 **

38. 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 *

39. Monaro M., Fugazza F.I., Gamberini L., Sartori G. (2017). How Human-Mouse Interaction can Accurately Detect Faked Responses About Identity. In: Gamberini L., Spagnolli 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 *

40. 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 *

41. 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 *@

42. 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

1. 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

2. 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

3. 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

4. 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: Mazza C., Monaro M., Colasanti M., Ricci E., Di Domenico A., Roma P. (2021). *Application of mouse-tracking temporal measures and machine learning models to detect a faking-good response style in personality questionnaires with four choice alternatives*. ACCEPTED TO 2021 Society for Personality Assessment (SPA) convention. ONLINE CONFERENCE DUE TO COVID-19.

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 CANCEALED DUE TO COVID-19.

Abstract: De Rosario H., Monaro M., Maciá M., Baydal-Bertomeu J.M., Sartori G. (2020). *Integrity test for the assessment of whiplash-associated disorders*. ACCEPTED TO BritSpine 2020 Glasgow, UK April 1st-3th, 2020. CONFERENCE CANCEALED DUE TO COVID-19.

Abstract: Scarpazza C., Monaro M., Orrù G., Sartori G. (2019). *L'analisi cinematica 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 tdcs 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

Monaro M. (2019). 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. (2019). 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 - Milan (Italy).

Porreca A., Sacchi C., Monaro M. (2019). 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. (2017). 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. (2017). 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. (2016). 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., (2016). 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).

Scientific talks at national and international conferences

"Detecting deception through facial expressions. A comparison between human judges and machine learning models" at Conference on Applications of Artificial Intelligence in Forensics, 28th January 2022 (Roma, ITALY)

"Predicting Twitter Users' Political Orientation: An Application to the Italian Political Scenario" at ASONAM 2020 – The IEEE/ACM International Conference on Advances in Social Networks Analysis and Mining, 7th-10th December 2020 (The Hague, NETHERLANDS). ONLINE CONFERENCE DUE TO COVID-19.

"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" at HCI International 2020 - 22nd international conference on human-computer interaction, 19th-24th July 2020 (Copenhagen, DENMARK). ONLINE CONFERENCE DUE TO COVID-19.

"Mouse tracking: a tool to detect fake good and fake bad behaviours", at XXI National Congress Italian Psychological Association Clinical and Dynamic Section, 27th-29th September 2019 (Milano, ITALY).

"The Online Identity Detection via Keyboard Dynamics", at Future Technologies Conference 2018 (FTC 2018), 13th-14th November 2018 (Vancouver, CANADA).

"Lie detection in the online environment", at the 19th World Congress of Psychophysiology, 4th-9th September 2018, School for Advances Studies (Lucca, ITALY).

"Spotting faked identities via mouse dynamics using complex questions", at the 32nd International BCS Human Computer Interaction Conference, 2nd-6th July 2018 (Belfast, NORTHERN IRELAND).

"How human-mouse interaction can accurately detect fake responses about identity", at the 5th International Workshop on Symbiotic Interaction, 29th-30th September 2016, University of Padova (Padova, ITALY).

"Breaking the wall of terrorism", at the Falling Walls Lab Naples, 20th September 2016, University of Naples Federico II (Napoli, ITALY).

"Identity verification using a kinematic memory detection technique", at the 7th International Conference on Applied Human Factors and Ergonomics (AHFE) and the Affiliated Conferences, 27th-31st July 2016, Walt Disney World, Swan and Dolphin Hotel (Orlando FL, USA).

"A technique to detect fake identities with high accuracy and its effect on cognitive privacy", at the VIII° International Scientific Conference on Neuroethics and Third Conference of the Italian Society for Neuroethics (SINe): The emotional and the rational brain. Frontiers in neuroethics, 18th-20th May 2016, University of Padova (Padova, ITALY).

Research Projects, Grants and awards

Participation in the **project** "**Back-UP: Personalised Prognostic Models to Improve Well-being and Return to Work After Neck and Low Back Pain**", project No 777090 founded by **European Union's Horizon 2020** research and innovation programme.

Scholarship "Young Forum Gastein 2021" (YFG) supported by European Health Forum Gastein (EHFG) to attend European Health Forum Gastein 2021. The scholarship covered the EHFG conference registration fee and participation in YFG programme 2021.

Prize for Innovation in Psychology by Ordine degli Psicologi del Veneto. First place in the category "Innovative areas of application in psychology" presenting the project "Osservare la genitorialità attraverso la visione artificiale: un sistema di codifica automatica a supporto del clinico per predire la qualità delle interazioni adulto-bambino" (Observing parenting through computer vision: an automatic detection system to support the clinician in the prediction of the quality of parent-child interactions), 6th June 2019 (Padova, ITALY). Applicants: Alessio Porreca (PI), Merylin Monaro (Co-Applicant), Alessandra Simonelli (Co-Applicant), Lamberto Ballan (Co-Applicant). **Funding granted: 2500€.**

Research projects for young researchers ("Progetti di ricerca per giovani ricercatori" - BIRD 2018/20), funded by Department of Developmental Psychology and Socialization (DPSS) of Padova University. Grant won with the project "Observing parenting through computer vision: can a multi-person body detection system predict the quality of parent-child interactions?". Applicants: Alessio Porreca (PI), Merylin Monaro (Co-Applicant), Mirko Polato (Co-Applicant). **Funding granted: 3000€.**

Prize for Innovation in Psychology by Ordine degli Psicologi del Veneto. First place in the category "Innovative areas of application in psychology" presenting the project "Verifica dell'autenticità dell'identità auto-dichiarata attraverso l'analisi cinematica dei processi cognitivi sottostanti la menzogna" (Verification of self-declared identities through the kinematic analysis of the cognitive processes underlying deception), 26th May 2016 (Padova, ITALY). Applicants: Merylin Monaro (PI), Giuseppe Sartori (Co-Applicant). **Funding granted: 2500€.**

Patents

Methods and systems for detection of faked identity using unexpected questions and computer input dynamics
Pub. No. Patent **US 2018 / 0365784 A1**
Pub. Date: 20th December 2018
Inventor: Giuseppe Sartori, Merylin Monaro

Teaching activity

Date: October 2018 – to now

Activity: **Exam committee member** for the following courses:
- Cognitive, Behavioural and Social Data (Master's Degree in Data Science, School of Science, University of Padova)
- Forensic Psychology and Psychopathology (Master's Degree in Clinical Psychology/Neuroscience and Neuropsychological Rehabilitation), School of Psychology, University of Padova
- Forensic Neuroscience (Master's Degree in Law, School of Law, University of Padova)
- Forensic Psychology (Master's Degree in Clinical Psychology/Cognitive Applied Psychology, University of Padova)

Date: January 2022 – February 2022

Activity: **Teaching (10 hours) for the PhD course "Tools and applications of machine learning"** (compulsory course of the **PhD School in Brain, Mind and Computer Science**, University of Padova). Teaching language: English.

Date: February 2022

Activity: Teaching (4 hours) for the Master in Neuromarketing and Behavior Design, Centro Universitario Internazionale (C.U.I.), Arezzo. Teaching language: Italian.

Date: February 2021 – September 2021

Activity: **Adjunct professor (docenza a contratto) for the course "Work and organizational psychology"**

(SSD M-PSI/06, 4 CFU) (Master's Degree in Health care professions and rehabilitation, Department of molecular medicine, University of Padova). Teaching language: English.

Date | May 2021

Activity | Teaching (4 hours) for the II level Master in Clinical Criminology, Legal Psychology and Forensic Psychiatry (Master di II livello in Criminologia Clinica, Psicologia Giuridica e Psichiatria Forense), Sapienza Università di Roma. Teaching language: Italian.

Date | April 2021

Activity | Teaching for the Advanced Course for Research (CAR) entitled "Autobiographical Implicit Association Test and other Implicit Techniques" (20 hours) (Department of General Psychology, University of Padova). Teaching language: Italian.

Date | January 2021 – February 2021

Activity | **Teaching (10 hours) for the PhD course "Tools and applications of machine learning"** (compulsory course of the **PhD School in Brain, Mind and Computer Science**, University of Padova). Teaching language: English.

Date | October 2020 – January 2021

Activity | Teaching assistance (15 hours) for the course "Consumer Bahavior" (Department of Agronomy, Food, Natural resources, Animals and Environment, University of Padova). Teaching language: English.

Date | October 2020

Activity | Teaching for the Advanced Course for Research (CAR) entitled "Autobiographical Implicit Association Test and other Implicit Techniques" (20 hours) (Department of General Psychology, University of Padova). Teaching language: Italian.

Date | March 2020 – June 2020

Activity | Teaching assistance (20 hours) for the course "Cognitive Neuropsychology" (School of Psychology, University of Padova). Teaching language: Italian.

Date | October 2019 – September 2020

Activity | **Adjunct professor (docenza a contratto) for the course "Cognitive Behavioural and Social Data" (SSD M-PSI/06, 2 CFU)** (**Master's Degree in Data Science**, School of Science, University of Padova). Teaching language: English.

Date | January 2020 – February 2020

Activity | **Teaching (10 hours) for the PhD course "Tools and applications of machine learning"** (compulsory course of the **PhD School in Brain, Mind and Computer Science**, University of Padova). Teaching language: English.

Date | March 2019 – June 2019

Activity | Teaching assistance (10 hours) for the course "Cognitive Neuropsychology" (School of Psychology, University of Padova). Teaching language: Italian.

Date | April 2019

Activity | Teaching for the Advanced Course for Research (CAR) entitled "Autobiographical Implicit Association Test and other Implicit Techniques" (20 hours) (Department of General Psychology, University of Padova). Teaching language: Italian.

Date	March 2018 – June 2018
Activity	Teaching assistance (40 hours) for the course “Human Electrophysiology” (School of Psychology, University of Padova). Teaching language: English.
Date	May 2018
Activity	Teaching for the Advanced Course for Research (CAR) entitled “Autobiographical Implicit Association Test and other Implicit Techniques” (20 hours) (Department of General Psychology, University of Padova). Teaching language: Italian.

Invited lectures and talks

Date	February 2022
	Invited talk for the Masters’ Degree in Cognitive Neuroscience and Clinical Neuropsychology at the School of Psychology (University of Padova). Topic: “Neuropsychological Assessment in forensic psychology”. Language: English.
Date	October 2021
	Invited lecture to the course “Cognitive, Behavioral and Social Data” (prof. Sartori) at the School of Science (University of Padova). Topic: “Implicit and explicit measures in psychology”. Language: English.
Date	October 2021
	Invited lecture to the course “Forensic Psychology” (prof. Codognotto) at the School of Psychology (University of Padova). Topic: “Introduction to lie detection and malingering detection”. Language: Italian.
Date	November 2021
	Invited lecture to the course “Cognitive, Behavioral and Social Data” (prof. Sartori) at the School of Science (University of Padova). Topic: “Lie detection through human-computer interaction”. Language: English.
Date	May 2021
	Invited lecture to the course “New trends in Neurosciencec” (prof. Scarpazza) at the School of Psychology (University of Padova). Topic: “Neuroscientific way to assess malingering”. Language: English.
Date	April 2021
	Invited lecture to the course “Social Psychology and Communication” (prof. Spagnolli) at the School of Psychology (University of Padova). Topic: “Measuring attitudes through Implicit Techniques”. Language: English.
Date	March 2021
	Invited lecture to the course “Forensic Neuroscience” (prof. Sartori) at the School of Law (University of Padova). Topic: “Introduction to lie detection”. Language: Italian.
Date	December 2020
	Invited lecture to the course “Artificial intelligence – economic and management applications” (Dr. Pasa) at the Department of Economics and Management (University of Padova). Topic: “Psychological user profiling”. Language: English.
Date	November 2020
	Invited lecture to the course “Consumer Bahavior” at the Department of Agronomy, Food, Natural resources, Animals and Environment (University of Padova). Topic: “Psychological consumer profiling with new technologies”. Language: English.

Date	April 2020
Activity	Invited lecture to the course “Cognitive Neuropsychology” (prof. Bisiacchi) at the School of Psychology (University of Padova). Topic: “Cognitive and neuropsychological bases of lie detection”. Language: Italian.
Date	April 2020
	Invited lecture to the course “Social Psychology and Communication” (prof. Spagnolli) at the School of Psychology (University of Padova). Topic: “Measuring attitudes through Implicit Techniques”. Language: English.
Date	March 2019
Activity	Invited lecture to the PhD course “Machine learning techniques to predict brain, mind and behavior” (prof. Navarin) at the PhD School in Brain, Mind and Computer Science (University of Padova). Topic: “The behavioural approach to lie detection: practical examples of machine learning applications”. Language: English.
Date	March 2019
Activity	Invited lecture to the course “Cognitive Neuropsychology” (prof. Bisiacchi) at the School of Psychology (University of Padova). Topic: “Applications of machine learning in cognitive neuropsychology”. Language: Italian.
Date	March 2019
Activity	Invited lecture to the course “Cognitive Neuropsychology” (prof. Bisiacchi) at the School of Psychology (University of Padova). Topic: “Cognitive and neuropsychological bases of lie detection”. Language: Italian.
Date	March 2019
Activity	Invited lecture to the course “Forensic Neuroscience” (prof. Sartori) at the School of Law (University of Padova). Topic: “Introduction to lie detection”. Language: Italian.
Date	December 2018
Activity	Invited lecture to the course “Cognitive, Behavioral and Social Data” (prof. Sartori) at the School of Science (University of Padova). Topic: “How to write the project report for the final exam”. Language: English.
Date	April 2018
Activity	Invited lecture to the course “Cognitive Neuropsychology” (prof. Bisiacchi) at the School of Psychology (University of Padova). Topic: “Cognitive and neuropsychological bases of lie detection”. Language: Italian.
Date	November 2017
Activity	Invited lecture to the course “Cognitive, Behavioral and Social Data” (prof. Sartori) at the School of Science (University of Padova). Topic: “Introduction to lie detection: physiological, linguistic and behavioural approaches”. Language: English.
Date	November 2017
Activity	Invited lecture to the course “Principles of Cognitive Neuroscience” (prof. Sartori) at the School of Science (University of Padova). Topic: “Applications of machine learning in cognitive neuroscience”. Language: English.
Date	November 2016
Activity	Invited lecture to the course “Principles of Cognitive Neuroscience” (prof. Sartori) at the School of Science (University of Padova). Topic: “Applications of machine learning in cognitive neuroscience”. Language: English.

Supervision activity

Co-supervisor of the following Bachelor’s thesis (n=8):

"A questionnaire on rare and impossible symptoms to detect simulation of whiplash syndrome". Student: Carlotta Zoso. Supervisor: Prof. Sartori. Thesis defended in September 2019.

"Detecting lies in online ratings through kinematic analysis of mouse movement". Student: Emanuela Cannonito. Supervisor: Prof. Sartori. Thesis defended in September 2019.

"Uncovering drug usage using reaction times". Student: Laura Danesin. Supervisor: Prof. Sartori. Thesis defended in June 2017.

"Detecting deception in weapon possession using reaction time". Student: Elisabetta Ghedin. Supervisor: Prof. Sartori. Thesis defended in June 2017.

"Identification of individuals who have engaged in the act of stealing through a lie-detection technique based on reaction time". Student: Debora Zaccoletti. Supervisor: Prof. Sartori. Thesis defended in June 2017.

"When lie detection procedures fail: a study about negative results checking the simulation of minor age". Student: Silvia Battiston. Supervisor: Prof. Sartori. Thesis defended in February 2017.

"The effect of changing response labels in an identity verification task through kinematic analysis of mouse movements". Student: Francesca Ileana Fugazza. Supervisor: Prof. Sartori. Thesis defended in September 2016.

"ID-Check: the use of reaction times to detect false identities". Student: Francesca Zecchinato. Supervisor: Prof. Sartori. Thesis defended in June 2016.

Co-supervisor of the following Master's thesis (n=25):

"Facial micro-expressions and lie detection: a comparison between human performance and artificial intelligence". Student: Stéphanie Maldera. Supervisor: Prof. Sartori. Thesis defended in July 2020.

"The kinematic analysis of mouse movements to detect deception about group membership". Student: Brigida Di Stasi. Supervisor: Prof. Sartori. Thesis defended in July 2020.

"Whiplash Assessment: a predictive model based on WAAS/IBV and Neck and Back Pain Simulation Questionnaires". Student: Elsa Melotti. Supervisor: Prof. Sartori. Thesis defended in April 2020.

"The role of metacognition in PTSD: testing the efficacy of a novel preventive psycho-educational intervention". Student: Francesca Zecchinato. Supervisor: Prof. Sartori. Thesis defended in December 2019

"Artificial Intelligence and handwriting analysis: a study on gender and sexual orientation identification through machine learning algorithms". Student: Valentina Fietta. Supervisor: Prof. Sartori. Thesis defended in October 2019.

"Human and artificial intelligence: the case of handwriting paternity". Student: Giulia Lusetti. Supervisor: Prof. Sartori. Thesis defended in October 2019.

"Context effect in detecting sexual orientation from face using a Deep Neural Network: replying Wang and Kosinki's study (2018)". Student: Sarah Bressanelli. Supervisor: Prof. Sartori. Thesis defended in October 2019.

"The Millon Clinical Multiaxial Inventory III in forensic contexts: a study on response styles in civil and penal cases at risk of simulation and dissimulation". Student: Cristina Lancini. Supervisor: Prof. Sartori. Thesis defended in October 2019.

"Lie Lie detection in the age of chatbots: a method to recognize online faked identities". Student: Alice Naomi Preti. Supervisor: Prof. Sartori. Thesis defended in October 2019.

"Detecting deception about group membership: an application of the mouse tracking technique". Student: Giulia Melis. Supervisor: Prof. Sartori. Thesis defended in April 2019.

"Application of the aIAT to detect simulation of whiplash syndrome". Student: Giuseppina Lucrezia

Marzolo. Supervisor: Prof. Sartori. Thesis defended in April 2019.

"The simulation of personality in the forensic field: an algorithm to identify the true personality profile". Student: Elisa Garavello. Supervisor: Prof. Sartori. Thesis defended in April 2019.

"Using blink rate to detect deception". Student: Federica Ragucci. Supervisor: Prof. Sartori. Thesis defended in October 2018.

"PostTraumatic Stress Disorder: a psychometric tool to detect malingering". Student: Irene Ronconi. Supervisor: Prof. Sartori. Thesis defended in October 2018.

"Offline Signature Verification: a comparison between human performance and deep learning models". Student: Valentina Currò. Supervisor: Prof. Sartori. Thesis defended in April 2018.

"Detecting malingering via mouse tracking: a comparison between clinical and subclinical population". Student: Annalisa D'Errico. Supervisor: Prof. Sartori. Thesis defended in April 2018.

"Validation of a tool for the detection of the simulation of anxiety disorders by the use of the dynamics of the mouse movement". Student: Erika Picotti. Supervisor: Prof. Sartori. Thesis defended in April 2018.

"What is hiding behind fake profiles online and how to uncover them with keystroke analysis". Student: Marta Businaro. Supervisor: Prof. Sartori. Thesis defended in October 2017.

"Uncovering drug usage using mouse kinematics". Student: Anna Giordano. Supervisor: Prof. Sartori. Thesis defended in July 2017.

"The use of switch cost in lie detection". Student: Attilio Matteo Magagnin. Supervisor: Prof. Sartori. Thesis defended in July 2017.

"Detecting lies on autobiographical events: the use of mouse dynamics". Student: Alessandra Guiotto. Supervisor: Prof. Sartori. Thesis defended in April 2017.

"Detection of malingered depression: implementation of a new tool for automatically detecting the simulated depression by kinematic analysis and machine learning techniques". Student: Andrea Toncini. Supervisor: Prof. Sartori. Thesis defended in December 2016.

"The effect of using negative sentences in an identity verification task through a kinematic analysis technique". Student: Sara Marcon. Supervisor: Prof. Sartori. Thesis defended in October 2016.

"Experimental research of resistance to countermeasures of a device for identification of false identities based on kinematic hand movements". Student: Angelica Bollini. Supervisor: Prof. Sartori. Thesis defended in October 2016.

"Keystroke and mouse dynamics: two new tools for the detection of false identities". Student: Chiara Galante. Supervisor: Prof. Sartori. Thesis defended in July 2016.

Supervisor of students for internships:
- Number of pre-lauream internships supervised: 4
- Number of post-lauream internships supervised: 4

Scientific and institutional organizational activity

Organizer (**Guest Editor**) of the **Special Issue "Human Interaction with Artificial Intelligence Systems: New human-centered perspectives and challenges" in IEEE Transactions on Human-Machine Systems** (November 2020 – November 2021).

Organizer (Guest Editor) of the Special Issue "COVID-19 Outbreak and beyond: Psychological and Behavioral Responses and Future Perspectives" in International Journal of Environmental Research and Public Health (November 2020 – September 2021).

Member of the Organization Committee for the Conference "Convegno Società di Psicologia

Giuridica", November 2020 (Padova, ITALY). ONLINE CONFERENCE DUE TO COVID-19

Member of the Local Organization Committee for the 2nd International Conference on Process Mining, October 4th-9th, 2020 (Padova, ITALY). ONLINE CONFERENCE DUE TO COVID-19

Organizer of the Special Session "Deep learning for brain data" at the 2019 International Joint Conference on Neural Networks (IJCNN), 14th-19th July 2019, (Budapest, HUNGARY).

Conference coordinator in the IX° International Scientific Conference on Neuroethics and Fourth Conference of the Italian Society for Neuroethics (SINe): Mind, Brain, And Body. A Neuroethical Perspective. University of Padova, May 17th-19th, 2017 (Padova, ITALY).

Tutor of the Master's Degree Course in "*Cognitive Neuroscience and Clinical Neuropsychology*" – Department of General Psychology (Padova University). Position held from January 2014 to 2021.

Reviewer and editorial activity

Member of the Editorial Board for the following journals:

Review Editor for Frontiers in Psychology and Frontiers in Psychiatry (specialty section of Psychopathology) – from February 2021 to date

Guest Editor for International Journal of Environmental Research and Public Health, Special Issue "COVID-19 Outbreak and beyond: Psychological and Behavioral Responses and Future Perspectives" – from November 2020 to date

Topic Editor for International Journal of Environmental Research and Public Health – from October 2020 to date

Guest Editor for IEEE Transactions on Human-Machine Systems – from October 2020 to date

Review Editor for Frontiers in Psychology (specialty section "Quantitative Psychology and Measurement") – from February 2020 to date

Article Editor for SAGE Open – from March 2021 to date

Reviewer for peer-reviewed journals:

Ad hoc reviewer for PLOS ONE
Ad hoc reviewer for BMC Psychology
Ad hoc reviewer for Frontiers in Psychiatry
Ad hoc reviewer for Frontiers in Psychology
Ad hoc reviewer for IEEE Transactions on Human-Machine Systems
Ad hoc reviewer for Psychological Injury and Law
Ad hoc reviewer for Psychophysiology
Ad hoc reviewer for International Journal of Psychophysiology
Ad hoc reviewer for SAGE Open
Ad hoc reviewer for Europe's Journal of Psychology
Ad hoc reviewer for Computers in Human Behavior
Ad hoc reviewer for Giornale Italiano di Psicologia
Ad hoc reviewer for Computers & Security
Ad hoc reviewer for Journal of Visualized Experiments
Ad hoc reviewer for Applied Cognitive Psychology
Ad hoc reviewer for Applied Psychology: Health and Well-Being
Ad hoc reviewer for Children
Ad hoc reviewer for Psychology Research and Behavior Management
Ad hoc reviewer for International Journal of General Medicine
Ad hoc reviewer for International Journal of Environmental Research and Public Health
Ad hoc reviewer for Journal of Clinical Medicine
Ad hoc reviewer for Behavioral Sciences
Ad hoc reviewer for IEEE Access

Reviewer for peer-reviewed conferences:
Ad hoc reviewer for 2019 International Joint Conference on Neural Networks (IJCNN)
Ad hoc reviewer for 8th IEEE International Workshop on Information Forensics and Security (WIFS) 2016
Ah hoc reviewer for NordCHI 2020

Reviewer for Institutions and Foundations providing monetary grants:
Israel Science Foundation (ISF)

Editorial assistant:
PsychNology Journal, 2015, Volume 13, Number 1, pages 1-120

Scientific collaborations

Social Cognitive and Neural Sciences Lab, New York University, New York (USA)
Topic: deception about group identity

Department of Neurosurgery, Stanford School of Medicine, Stanford University, California (USA)
Topic: application of machine learning models to predict stress related to COVID-19

Department of Environmental Medicine and Public Health, Icahn School of Medicine at Mount Sinai, New York (USA)
Topic: application of machine learning models to predict stress related to COVID-19

Department of Psychiatry, University of Saskatchewan (CA)
Topic: application of ML models to Big 5 traits, beliefs, and actions Related to COVID-19 restrictions

Instituto de Biomecánica de Valencia, Valencia (ES)
Topic: assessment of whiplash malingering

Dipartimento di Matematica, Università di Padova
Topic: machine learning and neural networks applied to lie detection and social psychology topics, digital security

Dipartimento di Neuroscienze Umane, Sapienza Università di Roma
Topic: fake good behaviours in personality assessment and malingering detection; application of ML models to COVID-19 related behaviours

U.O.C Neurologia, IRCSS Fondazione Ospedale Maggiore Policlinico di Milano
Topic: amnesia malingering

Dipartimento di Ingegneria dell'Informazione, delle Infrastrutture e dell'Energia Sostenibile, Università Mediterranea di Reggio Calabria
Topic: thermography and lie detection

Dipartimento di Psicologia dello Sviluppo e della Socializzazione, Università di Padova
Topic: computer vision applied to child-parent interactions

Dipartimento di Neuroscienze, Università di Padova
Topic: detecting emotion recognition impairment in anorexia truth mouse dynamics

Dissemination activities

Galileo Festival 2017. Coordinator of the talk "Le nuove macchine della verità". 11th May 2017, Padova.

Open Innovation Day 2016. Coordinator of the round table "Privacy, false identità online tra terrorismo, sicurezza e social networks". 30th September 2016, Padova.

E-book: Cantagallo A., Monaro M. *"La via telematica ed i social network in medicina"*. In *"*#D2DWISTER - *Introduzione al digitale e Social network"*, WoW: World of WISTER (2013).

Media coverage

19th May 2017. Le Scienze.
http://www.lescienze.it/lanci/2017/05/19/news/universita_di_padova_-

_trappola_per_terroristi_e_il_mouse_che_scopre_la_verita_-3534414/

19th May 2017. Repubblica.
http://www.repubblica.it/scienze/2017/05/19/news/da_come_muoviamo_il_mouse_si_capisce_se_diciamo_la_verita_-165862091/

22nd May 2017. Focus.
http://www.focus.it/comportamento/psicologia/la-nuova-macchina-della-verita-il-mouse

30th May 2017: Rai Scienze.
http://www.scienze.rai.it/articoli/vero-o-falso-ce-lo-dice-il-mouse-ricerca-dell%E2%80%99universit%C3%A0-di-padova-aiuter%C3%A0-la-lotta-al-terrorismo/37503/default.aspx

9th June 2017. Science.
http://www.sciencemag.org/news/2017/06/are-you-lying-about-your-identity-artificial-intelligence-can-tell-how-you-use-your

21st June 2017. CNN.
http://money.cnn.com/2017/06/21/technology/future/computer-mouse-honesty-study/index.html

September 2017. Le Scienze, Mente e Cervello.
http://www.lescienze.it/mente-e-cervello/2017/08/29/news/il_numero_di_m_c_di_settembre_2017-3635067/

Computer skills

Software for experiments: E-prime, MouseTracker. Qualtrics

Software for statistical analysis: SPSS, R Studio, JASP

Software for machine learning analysis: WEKA

Programming languages: R, Python

Language skills

Mother tongue **Italian**

Other Languages

Self assessment *European level (*)*	Comprehension				Spoken				Written	
	Listening		Reading		Oral interaction		Speaking			
English	C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user
German	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, 15.03.2022