

Mónica da Silva Cameirão

Mónica is an Assistant Professor and researcher at the University of Madeira (UMa) and integrated member of the NOVA Laboratory for Computer Science and Informatics (NOVA LINCS). She is the current Director of the PhD Program in Informatics Engineering of UMa. In the past she worked as research assistant at the SPECS Laboratory of the Universitat Pompeu Fabra and at the Institute of Neuroinformatics, ETH-Zürich, Switzerland; and was visiting scholar at the Quality of Life Technologies center of Carnegie Mellon University. Since Mónica arrived in Madeira in 2011, she has been co-principal investigator and co-founder of the NeuroRehabLab Research Group, an interdisciplinary research group that investigates at the intersection of technology, neuroscience and clinical practice to find novel solutions to increase the quality of life of those with special needs. Mónica has been particularly involved in the development and clinical assessment of Virtual Reality (VR) technologies for stroke rehabilitation, exploring specific brain mechanisms that relate to functional recovery to approach motor and cognitive stroke rehabilitation by means of non-invasive and low-cost technologies. Her research addresses aspects such as serious gaming, personalization of training, integrative motor-cognitive tasks, and physiological computing. In 2016, Mónica has been awarded the ISVR Early Career Investigator Award, an award granted by the International Society for Virtual Rehabilitation to recognize and acknowledge outstanding contributions by early career scientists whose research relates to virtual rehabilitation. Since 2020, Mónica is a member of the Ethics Committee of UMa.

Identification

Personal identification

Full name

Mónica da Silva Cameirão

Birth date

1976/03/02

Author identifiers

Ciência ID

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Websites

<https://neurorehabilitation.m-iti.org/lab/> (Professional)

Knowledge fields

Exact Sciences - Computer and Information Sciences
 Engineering and Technology - Electrotechnical Engineering, Electronics and Informatics
 Engineering and Technology - Medical Engineering

Affiliation

Science

	Category Host institution/organization	Employer
2013/02 - Current	Researcher (Research)	Madeira Interactive Technologies Institute, Portugal
2006/09 - 2010/09	Research Assistant (Research)	Universitat Pompeu Fabra, Spain
2006/01 - 2006/08	Research Assistant (Research)	Institut für Neuroinformatik, Switzerland

Teaching in Higher Education

	Category Host institution/organization	Employer
2014/03 - Current	Assistant Professor (University Teacher)	Universidade da Madeira, Portugal
2012/09 - 2013/02	Invited Assistant Professor (University Teacher)	Universidade da Madeira, Portugal
2006/09 - 2007/07	Tutor (University Teacher)	Universitat Pompeu Fabra, Spain
2002/11 - 2005/07	Tutor (University Teacher)	Universidade de Aveiro, Portugal

Positions / Appointments

	Category Host institution/organization	Employer
2021/01/26 - Current	Course Director of the PhD in Informatics Engineering Universidade da Madeira, Portugal	Universidade da Madeira, Portugal
2020/07/14 - Current	Member of the Ethics Committee Universidade da Madeira, Portugal	Universidade da Madeira, Portugal

Projects

Grant

	Designation	Funders
2022/01/12 - 2023/07/11	AViR: Adaptive Virtual Reality for coping with involuntary early pregnancy loss EXPL/CCI-INF/0298/2021 Principal investigator Universidade da Madeira, Portugal	Fundação para a Ciência e a Tecnologia, Portugal
2018/10 - 2021/09	NEUR AUGVR: Stroke Neurorehabilitation Augmented by Virtual Reality and EEG-neurofeedback: Neuroimaging-based Validation and Optimization PTDC/CCI-COM/31485/2017 Researcher Madeira Interactive Technologies Institute, Portugal	Fundação para a Ciência e a Tecnologia, Portugal
2018/10 - 2021/09	BRANT: Belief Revision applied to Neurorehabilitation Therapy PTDC/CCI-COM/31046/2017 Researcher Madeira Interactive Technologies Institute, Portugal	Fundação para a Ciência e Tecnologia, Portugal
2017/01 - 2020/06	MACBIOIDI: Promoting the cohesion of Macaronesian regions through a common ICT platform for biomedical R & D & I MAC/1.1.B/098 Principal investigator Madeira Interactive Technologies Institute, Portugal	Interreg Europe, France
2014/08 - 2018/12	AHA: Augmented Human Assistance CMUP-ERI/HCI/0046/2013 Researcher Madeira Interactive Technologies Institute, Portugal	Fundação para a Ciência e a Tecnologia, Portugal
2012/06 - 2016	REHABNET: Neuroscience based interactive systems for motor rehabilitation 303891 FP7-PEOPLE-2011-CIG Researcher Madeira Interactive Technologies Institute, Portugal	

2009 - 2010	Rehabilitation Gaming System AAL/ISCI III PI08/90940 PhD Student Fellow Universitat Pompeu Fabra, Spain Hospital Universitari Vall d'Hebron, Spain Hospital de l'Esperança, Spain Heinrich Heine Universität, Germany Fundació TIC Salut, Spain Guger Technologies OEG, Austria Tyromotion GmbH, Austria	European Commission, Belgium
2006 - 2009	PRESENCIA: Research Encompassing Sensory Enhancement, Neuroscience, Cerebral-Computer Interfaces and Application FP6 IST 27731 PhD Student Fellow Universitat Pompeu Fabra, Spain Universitat Politècnica de Catalunya, Spain University College London, United Kingdom Institut d'Investigacions Biomèdiques August Pi i Sunyer, Spain Technische Universität Graz, Austria Guger Technologies OEG, Austria Israel Institute of Technology, Israel PERCRO - Scuola Superiore Sant'Anna, Italy Universität Zürich, Switzerland University of London, United Kingdom University of Cambridge, United Kingdom Technische Universität München, Germany Chalmers tekniska högskola, Sweden Karolinska Institutet, Sweden	European Commission, Belgium

Outputs

Publications

- Book chapter
- 1 Afonso Gonçalves; Filipa Nóbrega; Mónica Cameirão; John E. Muñoz; Élvio Gouveia; Sergi Bermudez i Badia. "From Body Tracking Interaction in Floor Projection Displays to Elderly Cardiorespiratory Training Through Exergaming". In *Physiological Computing Systems*. 2019.
10.1007/978-3-030-27950-9_4
 - 2 Paulino, Teresa; Muñoz, John; Bermudez, Sergi; Cameirão, Mónica S.. "Design of an Integrative System for Configurable Exergames Targeting the Senior Population". In *Advances in Intelligent Systems and Computing*, 287-292. Springer International Publishing, 2018.
10.1007/978-3-030-02053-8_44
 - 3 Cameirão, Mónica S.; Bermúdez i Badia, Sergi. "14. An Integrative Framework for Tailoring Virtual Reality Based Motor Rehabilitation After Stroke". In *Human Computer Confluence*, 244-261. Warsaw, Poland: De Gruyter Open, 2016.
Published · 10.1515/9783110471137-014

- 4 Neves, Davide; Vourvopoulos, Athanasios; Cameirão, Mónica; Bermúdez i Badia, Sergi. "Personalization of Assistance and Knowledge of Performance Feedback on a Hybrid Mobile and Myo-electric Robotic System for Motor Rehabilitation After Stroke". In *ICTs for Improving Patients Rehabilitation Research Techniques*, 91-103. Berlin, Heidelberg: Springer Berlin Heidelberg, 2015.
Published · 10.1007/978-3-662-48645-0_9
- 5 Mónica S Cameirão; Sergi Bermúdez i Badia; Esther Duarte; Paul FMJ Verschure. "The Rehabilitation Gaming System: a Review". In *Advanced Technologies in Rehabilitation - Empowering Cognitive, Physical, Social and Communicative Skills through Virtual Reality, Robots, Wearable Systems and Brain-Computer Interfaces*, 65-83. Amsterdão, Netherlands: IOS Press, 2009.
Published · 10.3233/978-1-60750-018-6-65
- 6 Paul FMJ Verschure; Mónica S Cameirão; Alberto Garcia; Teresa Roig; José M Tormos; Álvaro Pascual-Leone. "Bases neurobiológicas de la telerrehabilitación". In *Análisis del estado actual de los servicios de telemedicina enfocado a evaluar la viabilidad de un programa de telerrehabilitación en pacientes con una gran discapacidad de origen neurológico*, 23-32. Barcelona, Spain: Agència d'Avaluació de Tecnologia i Recerca Mèdiques de Catalunya, 2007.
Published

Conference abstract

- 1 Gonçalves, A.R.; Munoz, J. E.; Rubio, E.; Mónica S Cameirão; Bermúdez i Badia, Sergi. "Portuguese Tradition Inspired Exergames for Older People - Strategic Tools to Promote Functional Fitness". Paper presented in *5th International Congress on Sport Sciences Research and Technology Support, Funchal, 2017*.
Published
- 2 Susana Rodriguez; Sergi Bermúdez i Badia; Mónica S Cameirão; Ampar Cuxart; Esther Duarte; Duff, Armin; Paul FMJ Verschure. "Effects of Virtual Reality Upper Limb Based Training (Rehabilitation Gaming System) on Spasticity, Shoulder Pain, and Depression After Stroke". Paper presented in *AAPM&R 2011 Annual Assembly, Orlando, 2011*.
Published · 10.1016/j.pmrj.2011.08.013
- 3 Mónica S Cameirão; Sergi Bermúdez i Badia; Esther Duarte; Paul FMJ Verschure. "Augmenting the Rehabilitation Gaming System with haptics and orthosis". Paper presented in *Annual CyberTherapy and CyberPsychology 2009 conference, Villa Caramora, 2009*.
Published · 10.3389/conf.neuro.14.2009.06.110

Conference paper

- 1 Paulino, Teresa; Cameirão, Mónica da Silva. "Characterizing the Use of Interactive Technologies for Cognitive Rehabilitation in Portuguese Healthcare Institutions: Preliminary Results". Paper presented in *13th International Conference on Disability, Virtual Reality & Associated Technologies, Serpa, 2021*.
Published
- 2 Muhammad Asif Ahmad; Cameirão, Mónica da Silva. "Road crossing behaviors of Pedestrians in two different Virtual Reality Environments". Paper presented in *13th International Conference on Disability, Virtual Reality & Associated Technologies, Serpa, 2021*.
Published
- 3 CABRAL, DIOGO; Castro, Deborah; M. Rigby, Jacob; Vasanth, Harry; Mónica S Cameirão; Bermúdez i Badia, Sergi; Nisi, valentina. "To Binge or not to Binge: Viewers Moods and Behaviors During the Consumption of Subscribed Video Streaming". Paper presented in *International Conference on Entertainment Computing, Xi'an, 2020*.

Published

- 4 Silva, Paula Alexandra; Bermúdez i Badia, Sergi; Mónica S Cameirão. "Diving into a Decade of Games for Health Research: A Systematic Review". Paper presented in *Fifth International Congress on Information and Communication Technology, London, 2020*.

Published

- 5 Pereira, Fabio; Bermudez i Badia, Sergi; Jorge, Carolina; da Silva Cameirao, Monica. "Impact of Game Mode on Engagement and Social Involvement in Multi-User Serious Games with Stroke Patients". Paper presented in *International Conference on Virtual Rehabilitation (ICVR), 2019*.
10.1109/icvr46560.2019.8994505
- 6 Sousa, H.; Bermudez i Badia, S.; Gouveia, E. R.; Cameirao, M.S.; Goncalves, A.; Munoz, J. E.; Paulino, T; et al. "Custom-made exergames for older people: New inputs for multidimensional physical". Paper presented in *5th Experiment International Conference (exp.at'19), 2019*.
10.1109/expat.2019.8876569
- 7 Paulino, Teresa; i Badia, Sergi Bermudez; Cameirao, Monica. "Usability evaluation of an integrative exergaming system for the senior population". Paper presented in *5th Experiment International Conference (exp.at'19), 2019*.
10.1109/expat.2019.8876582
- 8 Munoz, J.E.; Goncalves, A.; Cameirao, M.S.; Bermudez i Badia, S.; Gouveia, E.R.. "Measured and Perceived Physical Responses in Multidimensional Fitness Training through Exergames in Older Adults". Paper presented in *10th International Conference on Virtual Worlds and Games for Serious Applications (VS-Games), 2018*.
10.1109/vs-games.2018.8493433
- 9 Muñoz, John E.; Cameirão, M.; Bermúdez i Badia, S.; Gouveia, E. Rubio. "Closing the Loop in Exergaming - Health Benefits of Biocybernetic Adaptation in Senior Adults". Paper presented in *The Annual Symposium on Computer-Human Interaction in Play - CHI PLAY '18, 2018*.
10.1145/3242671.3242673
- 10 Fábio Pereira; Rúben Ornelas; Sergi Bermúdez i Badia; Mónica S Cameirão. "Exploring Materials and Object Properties in an Interactive Tangible System for Upper Limb Rehabilitation". Paper presented in *12th International Conference on Disability Virtual Reality and Associated Technologies, Nottingham, 2018*.

Published

- 11 Luís Ferreira; Mónica S Cameirão; Bermúdez i Badia, Sergi. "Music-based Assistive Feedback System for the Exploration of Virtual Environments in Individuals with Dementia". Paper presented in *ICVR 2017 - International Conference on Virtual Rehabilitation, Montreal, 2017*.

Published

- 12 Munoz, J. E.; Rubio, E.; Mónica S Cameirão; Bermúdez i Badia, Sergi; Muñoz, J.E.; Gouveia, E.R.; Cameirão, M.S.; Badia, S.B.I.. "The Biocybernetic Loop Engine an integrated tool for creating physiologically adaptive videogames". Paper presented in *4th International Conference on Physiological Computing, Madrid, 2017*.

Published

- 13 Munoz, J. E.; Rubio, E.; Mónica S Cameirão; Bermúdez i Badia, Sergi. "Heart Rate Variability in Exergaming - Feasibility and Benefits of Physiological Adaptation for Cardiorespiratory Training in Older Adults by Means of Smartwatches". Paper presented in *5th International Congress on Sport Sciences Research and Technology Support, Funchal, 2017*.
Published
- 14 Cameirão, Mónica S.; Pereira, Fábio; Bermúdez i Badia, Sergi; Mónica S Cameirão; Fábio Pereira; Cameirao, M.S.; Pereira, F.; Badia, S.B.I.. "Virtual reality with customized positive stimuli in a cognitive-motor rehabilitation task: a feasibility study with subacute stroke patients with mild cognitive impairment". Paper presented in *ICVR17 - International Conference on Virtual Rehabilitation, Montreal, 2017*.
Published · 10.1109/ICVR.2017.8007543
- 15 Gouveia, Élvio Rúbio; Bernardino, Alexandre; Cameirão, Mónica S.; Cardona, John Muñoz; Gonçalves, Afonso; Paulino, Teresa; Sousa, Honorato; et al. "Augmented Human Assistance (AHA) - Active aging · Serious games · Assistive robotics · Augmented reality · Virtual coach". 2017.
10.5220/0008861800200041
- 16 Gonçalves, A.R.; Mónica S Cameirão. "Evaluating Body Tracking Interaction in Floor Projection Displays with an Elderly Population". Paper presented in *PhyCS 2016 - 3rd International Conference on Physiological Computing Systems, Lisbon, 2016*.
Published
- 17 A. L. Faria; Joana Couras; Mónica S Cameirão; Teresa Paulino; Gabriel Costa; Bermúdez i Badia, Sergi. "Impact of combined cognitive and motor rehabilitation in a virtual reality task: an on-going longitudinal study in the chronic phase of stroke". Paper presented in *11th Intl Conf. on Disability, Virtual Reality and Assoc. Technologies, Los Angeles, 2016*.
Published
- 18 Munoz, J. E.; Mónica S Cameirão; Rubio, E.; Teresa Paulino; Bermúdez i Badia, Sergi. "Modulation of Physiological Responses and Activity Levels During Exergame Experiences". Paper presented in *VS-Games 2016 - 8th International Conference on Virtual Worlds and Games for Serious Applications, Barcelona, 2016*.
Published
- 19 A. L. Faria; Mónica S Cameirão; Teresa Paulino; Bermúdez i Badia, Sergi; Faria, A. L.; Cameirao, M.S.; Paulino, T.; BermudezBadia, S.. "The benefits of emotional stimuli in a virtual reality cognitive and motor rehabilitation task: Assessing the impact of positive, negative and neutral stimuli with stroke patients.". Paper presented in *ICVR 2015 - International Conference on Virtual Rehabilitation, Valencia, 2015*.
Published · 10.1109/ICVR.2015.7358584
- 20 Munoz, J. E.; Bermudez i Badia, S.; Rubio, E.; Cameirao, M. S.. "Visualization of multivariate physiological data for cardiorespiratory fitness assessment through ECG (R-peak) analysis". Paper presented in *37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), Milan, 2015*.
Published · 10.1109/EMBC.2015.7318381
- 21 Cameirão, M.S.; Gonçalves, A.R.; Bermúdez i Badia, S.; Gouveia, E.R.. "Automating senior fitness testing through gesture detection with depth sensors". Paper presented in *IET International Conference on Technologies for Active and Assisted Living (TechAAL), London, UK, 2015*.
Published · 10.1049/ic.2015.0132

- 22 Neves, Davide; Vourvopoulos, Athanasios; Cameirão, Mónica; Bermúdez i Badia, Sergi. "Personalization of assistance and knowledge of performance feedback on a hybrid mobile and myo-electric robotic system for motor rehabilitation after stroke". 2015.
- 23 David Neves; Athanasios Vourvopoulos; Mónica S Cameirão; Bermúdez i Badia, Sergi. "An Assistive Mobile Platform for Delivering Knowledge of Performance Feedback". Paper presented in *REHAB 2014 - 2nd Workshop on ICTs for improving Patients Rehabilitation Research Techniques, PervasiveHealth'14 - the 8th International Conference on Pervasive Computing Technologies for Healthcare, Oldenburg, 2014*.
Published
- 24 Athanasios Vourvopoulos; A. L. Faria; Mónica S Cameirão; Bermúdez i Badia, Sergi. "Quantifying cognitive-motor interference in virtual reality training after stroke: the role of interfaces". Paper presented in *ICDVRAT 2014 - 10th International Conference on Disability, Virtual Reality and Associated Technologies, Gotenburg, 2014*.
Published
- 25 A. L. Faria; Athanasios Vourvopoulos; Mónica S Cameirão; Bermúdez i Badia, Sergi. "Integrative virtual reality cognitive-motor intervention approach in stroke rehabilitation: a pilot study with the RehabNet". Paper presented in *ICDVRAT 2014 - 10th International Conference on Disability, Virtual Reality and Associated Technologies, Gotenburg, 2014*.
Published
- 26 Vourvopoulos, Athanasios; Faria, Ana Lúcia; Cameirão, Mónica S.; Bermúdez i Badia, Sergi. "RehabNet: a distributed architecture for motor and cognitive neuro-rehabilitation". Paper presented in *IEEE 15th International Conference on e-Health Networking, Applications Services (Healthcom), Lisboa, 2013*.
- 27 Mónica S Cameirão; Sergi Bermúdez i Badia; Esther Duarte; Paul FMJ Verschure. "Stroke Rehabilitation using the Rehabilitation Gaming System (RGS): initial results of a clinical study". Paper presented in *CyberTherapy 13 Conference, San Diego, 2008*.
Published
- 28 Cameirao, Monica S.; Bermudez i Badia, Sergi; Oller, Esther Duarte; Verschure, Paul F. M. J.. "Using a multi-task adaptive VR system for upper limb rehabilitation in the acute phase of stroke". Paper presented in *2008 Virtual Rehabilitation, Vancouver, BC, 2008*.
Published · 10.1109/ICVR.2008.4625112
- 29 Cameirao, Monica S.; Badia, Sergi Bermudez i; Zimmerli, Lukas; Oller, Esther Duarte; Verschure, Paul F. M. J.. "The Rehabilitation Gaming System: a Virtual Reality Based System for the Evaluation and Rehabilitation of Motor Deficits". Paper presented in *2007 Virtual Rehabilitation, Venice, Italy, 2007*.
Published · 10.1109/ICVR.2007.4362125
- 30 Mónica S Cameirão; Sergi Bermúdez i Badia; Zimmerli, Lukas; Duarte Oller, Esther; Paul FMJ Verschure. "A virtual reality system for motor and cognitive neurorehabilitation". Paper presented in *9th European Conference for the Advancement of Assistive Technology in Europe, San Sebastián, 2007*.
Published
- 31 Mónica S Cameirão; Sergi Bermúdez i Badia; Kumar Mayank; Christopher Guger; Paul FMJ Verschure. "Physiological Responses during Performance within a Virtual Scenario for the Rehabilitation of Motor Deficits". Paper presented in *10th Annual International Workshop on Presence, Barcelona,*

2007.

Published

- 32 Eng, Kynan; Siekierka, Ewa; Mónica S Cameirão; Zimmerli, Lukas; Pyk, Pawel; Duff, Armin; Erol, F.; et al. "Cognitive Virtual-Reality Based Stroke Rehabilitation". Paper presented in *World Congress on Medical Physics and Biomedical Engineering, Seoul, 2006*.

Published

- 33 Mónica S Cameirão; MC Baptista; J Guedes de Oliveira; D Reis; FV Abreu; L Santos; JL Pinto. "A physics engineering project on health sciences". Paper presented in *PTEE 2002 - 3rd European Conference on Physics Teaching in Engineering Education, Leuven, 2002*.

Published

- 34 Mónica S Cameirão; B Batista; JL Pinto; FV Abreu. "Coordination in bimanual human motion". Paper presented in *BioEng' 2001 – 6th Portuguese Conference on Biomedical Engineering, Faro, 2001*.

Published

Journal article

- 1 Pereira, Fábio; S. Cameirão, Mónica; Bermúdez i Badia, Sergi. "The impact of exergames on the functional balance of a teenager with cerebral palsy: a case report". *Disability and Rehabilitation: Assistive Technology* (2021): 1-10. <http://dx.doi.org/10.1080/17483107.2021.1980623>.
Published · [10.1080/17483107.2021.1980623](https://doi.org/10.1080/17483107.2021.1980623)
- 2 Gonçalves, Afonso Rodrigues; Cardona, John Muñoz; Cameirão, Mónica da Silva; Gouveia, Elvio Rubio; Sousa, Honorato; Bermúdez i Badia, Sergi. "The Benefits of Custom Exergames for Fitness, Balance, and Health-Related Quality of Life: A Randomized Controlled Trial with Community-Dwelling Older Adults". *Games for Health* 10 4 (2021): 245-253. <https://www.liebertpub.com/doi/abs/10.1089/g4h.2020.0092>.
Published
- 3 Pereira, Fábio; Bermúdez i Badia, Sergi; Jorge, Carolina; Cameirão, Mónica S.. "The use of game modes to promote engagement and social involvement in multi-user serious games: a within-person randomized trial with stroke survivors". *Journal of NeuroEngineering and Rehabilitation* 18 1 (2021): <http://dx.doi.org/10.1186/s12984-021-00853-z>.
Published · [10.1186/s12984-021-00853-z](https://doi.org/10.1186/s12984-021-00853-z)
- 4 Andrade Ferreira, Luis Duarte; Ferreira, Henrique; Cavaco, Sofia; Cameirão, Mónica S; Bermúdez i Badia, Sergi. "User Experience of Interactive Technologies for People With Dementia: Comparative Observational Study". *JMIR Serious Games* 8 3 (2020): e17565. <http://dx.doi.org/10.2196/17565>.
Published · Open access · [10.2196/17565](https://doi.org/10.2196/17565)
- 5 Muñoz, John Edison; Gonçalves, Afonso; Rúbio Gouveia, Elvio; Cameirão, Mónica S.; Bermúdez i Badia, Sergi. "Lessons Learned from Gamifying Functional Fitness Training Through Human-Centered Design Methods in Older Adults". *Games for Health Journal* 8 6 (2019): 387-406. <http://dx.doi.org/10.1089/g4h.2018.0028>.
[10.1089/g4h.2018.0028](https://doi.org/10.1089/g4h.2018.0028)
- 6 Pereira, Fábio; Bermúdez i Badia, Sergi; Ornelas, Rúben; S. Cameirão, Mónica. "Impact of game mode in multi-user serious games for upper limb rehabilitation: a within-person randomized trial on engagement and social involvement". *Journal of NeuroEngineering and Rehabilitation* 16 1 (2019): <http://dx.doi.org/10.1186/s12984-019-0578-9>.

10.1186/s12984-019-0578-9

- 7 Gonçalves, Afonso Rodrigues; Muñoz, John Edison; Gouveia, Elvino Rúbio; Cameirão, Mónica da Silva; Bermúdez i Badia, Sergi. "Effects of prolonged multidimensional fitness training with exergames on the physical exertion levels of older adults". *The Visual Computer* (2019): <http://dx.doi.org/10.1007/s00371-019-01736-0>.
- 10.1007/s00371-019-01736-0
- 8 Ballester, Belén Rubio; Maier, Martina; Duff, Armin; Cameirão, Mónica; Bermúdez, Sergi; Duarte, Esther; Cuxart, Ampar; et al. "A critical time window for recovery extends beyond one-year post-stroke". *Journal of Neurophysiology* 122 1 (2019): 350-357. <http://dx.doi.org/10.1152/jn.00762.2018>.
- 10.1152/jn.00762.2018
- 9 Modroño, Cristián; Bermúdez, Sergi; Cameirão, Mónica; Pereira, Fábio; Paulino, Teresa; Marcano, Francisco; Hernández-Martín, Estefanía; et al. "Is it necessary to show virtual limbs in action observation neurorehabilitation systems?". *Journal of Rehabilitation and Assistive Technologies Engineering* 6 (2019): 205566831985914. <http://dx.doi.org/10.1177/2055668319859140>.
- 10.1177/2055668319859140
- 10 Gonçalves, Afonso Rodrigues; Muñoz, John Edison; Gouveia, Elvino Rúbio; Cameirão, Mónica da Silva; Bermúdez i Badia, Sergi; Afonso Rodrigues Gonçalves; John Edison Muñoz; et al. "Effects of prolonged multidimensional fitness training with exergames on the physical exertion levels of older adults". *The Visual Computer* (2019): <http://hdl.handle.net/10400.13/2648>.
- 10.1007/s00371-019-01736-0
- 11 Bermudez i Badia, S.; Velez Quintero, L.; Cameirao, M.S.; Chirico, A.; Triberti, S.; Cipresso, P.; Gaggioli, A.. "Towards Emotionally-Adaptive Virtual Reality for Mental Health Applications". *IEEE Journal of Biomedical and Health Informatics* (2018): <http://www.scopus.com/inward/record.url?eid=2-s2.0-85055861956&partnerID=MN8TOARS>.
- 10.1109/JBHI.2018.2878846
- 12 Faria, Ana L.; Cameirão, Mónica S.; Couras, Joana F.; Aguiar, Joana R. O.; Costa, Gabriel M.; Bermúdez i Badia, Sergi; Faria, A.L.; et al. "Combined cognitive-motor rehabilitation in virtual reality improves motor outcomes in chronic stroke—a pilot study". *Frontiers in Psychology* 9 MAY (2018): <http://hdl.handle.net/10400.13/2642>.
- 10.3389/fpsyg.2018.00854
- 13 Muñoz, John Edison; Gouveia, Elvino Rubio; Cameirão, Mónica S.; Bermúdez i Badia, Sergi; Muñoz, J. E.; Rubio, E.; Mónica S Cameirão. "PhysioLab - a multivariate physiological computing toolbox for ECG, EMG and EDA signals: a case of study of cardiorespiratory fitness assessment in the elderly population". *Multimedia Tools and Applications* na (2017): na-na. <http://hdl.handle.net/10400.13/2201>.
- Published · [10.1007/s11042-017-5069-z](http://dx.doi.org/10.1007/s11042-017-5069-z)
- 14 Cameirão, Mónica S.; Smailagic, Asim; Miao, Guangyao; Siewiorek, Dan P.. "Coaching or gaming? Implications of strategy choice for home based stroke rehabilitation". *Journal of NeuroEngineering and Rehabilitation* 13 1 (2016): 1-15. <http://hdl.handle.net/10400.13/1281>.
- Published · dx.doi.org/10.1186/s12984-016-0127-8

- 15 Cameirão, Mónica S.; Faria, Ana Lúcia; Paulino, Teresa; Alves, Júlio; Bermúdez i Badia, Sergi; Mónica S Cameirão; A. L. Faria; Teresa Paulino. "The impact of positive, negative and neutral stimuli in a virtual reality cognitive-motor rehabilitation task: a pilot study with stroke patients". *Journal of Neuroengineering and Rehabilitation* 13(1):70 (2016): 1-15. <http://hdl.handle.net/10400.13/2635>.
Published · 10.1186/s12984-016-0175-0
- 16 Bermúdez i Badia, Sergi; Cameirão, M. S.. "The Neurorehabilitation Training Toolkit (NTT): A Novel Worldwide Accessible Motor Training Approach for At-Home Rehabilitation after Stroke". *Stroke Research and Treatment* 2012 nd (2012): 1-13. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3350995/?tool=pubmed>.
Published · 10.1155/2012/802157
- 17 Cameirao, M. S.; Badia, S. B. i.; Duarte, E.; Frisoli, A.; Verschure, P. F. M. J.. "The Combined Impact of Virtual Reality Neurorehabilitation and Its Interfaces on Upper Extremity Functional Recovery in Patients With Chronic Stroke". *Stroke* 43 10 (2012): 2720-2728. <http://stroke.ahajournals.org/content/43/10/2720.full>.
Published · 10.1161/STROKEAHA.112.653196
- 18 Mónica S Cameirão; Bermudez i Badia, Sergi; Esther Duarte; Paul FMJ Verschure. "Virtual reality based rehabilitation speeds up functional recovery of the upper extremities after stroke: A randomized controlled pilot study in the acute phase of stroke using the Rehabilitation Gaming System". *Restorative Neurology and Neuroscience* 29 5 (2011): 287-298. <http://iospress.metapress.com/content/41m1563183381664/>.
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Thesis /
Dissertation1 Cameirão, Mónica da Silva. "Desenvolvimento de instrumentos e metodologias para terapia e monitorização dos membros superiores". Master, Universidade de Aveiro, 2005. <http://hdl.handle.net/10773/2563>.**Intellectual property**

Patent

1 Paul FMJ Verschure; Sergi Bermúdez i Badia; Mónica S Cameirão. 2010. "Rehabilitation Gaming System". Spain.

Activities**Supervision**

	Thesis Title Role	Degree Subject (Type) Institution / Organization
2021/10/01 - Current	Desenvolvimento e avaliação da eficácia de uma intervenção cognitivo-comportamental em formato de Realidade Virtual para a promoção da adaptação à perda gestacional Supervisor	Doutoramento em Engenharia Informática (PhD) Universidade da Madeira, Portugal
2021/01/01 - Current	Emotional Regulation Assessment via multi-biosignal processing in a VR environment for neurorehabilitation Co-supervisor	Doutoramento em Engenharia Informática (PhD) Universidade da Madeira, Portugal
2019/09 - Current	BRaNTegrate: Promoting integrated person-centered care in cognitive rehabilitation using a serious gaming system Supervisor	Doutoramento em Engenharia Informática (PhD) Universidade da Madeira Faculdade de Ciências Exatas e da Engenharia, Portugal
2019/09 - Current	Development of a Tablet-based game for cognitive training Supervisor	Mestrado em Engenharia Informática (Master)
2017/10 - Current	Multi-user touch surfaces for promoting social participation and self-efficacy in upper-limb stroke rehabilitation Supervisor	Doutoramento em Engenharia Informática (PhD) Universidade da Madeira, Portugal
2019/09 - 2021/01/06	A web-based dashboard for data visualization of a serious gaming system Supervisor	Mestrado em Engenharia Informática (Master) Universidade da Madeira, Portugal

2018/09 - 2020/07/21	Virtual Reality for the treatment of phantom pain Co-supervisor	Master In Design Of Interactive Media (Master) Universidade da Madeira, Portugal
2020/02 - 2020/07	Serious games for multi-user stroke rehabilitation Supervisor	Licenciatura em Engenharia Informática (Degree) Universidade da Madeira, Portugal
2020/02 - 2020/07	Design and development of the Game Profile Modeler (GPM) Supervisor	Licenciatura em Engenharia Informática (Degree) Universidade da Madeira, Portugal
2020/02 - 2020/07	VR application for adjustment disorders Supervisor	Licenciatura em Engenharia Informática (Degree) Universidade da Madeira, Portugal
2017/09 - 2019/02	Design and implementation of an integrative System for configurable exergames targeting the senior population. Supervisor	Engenharia Informática (Master) Universidade da Madeira Faculdade de Ciências Exatas e da Engenharia, Portugal
2016 - 2019	VR PET: Promoting psychological wellbeing in Alzheimer patients through VR animal assisted therapy Co-supervisor	Mestrado em Engenharia Informática (Master) Universidade da Madeira, Portugal
2016/09 - 2018/05	Sonification of gaming Experiences Supervisor	Engenharia Informática (Master) Universidade da Madeira, Portugal
2014 - 2018	Physiological computing system for physical training in healthy older adults. An adaptive approach using serious health games Co-supervisor	Doutoramento em Informatics Engineering (PhD)
2015/09 - 2017/12	Cognitive-motor rehabilitation through low-cost mobile augmented reality technology. Supervisor	Engenharia Informática (Master) Universidade da Madeira, Portugal
2014 - 2017	Thought controlled games with Brain Computer Interfaces Co-supervisor	Mestrado em Engenharia Informática (Master) Universidade da Madeira, Portugal
2016 - 2016	Virtual Reality simulation of the Box and Blocks Test Supervisor	Licenciatura em Engenharia Informática (Degree) Universidade da Madeira, Portugal
2015 - 2015	Desenvolvimento de exergames para a população idosa.	Licenciatura em Engenharia Informática (Degree)

Supervisor	Universidade da Madeira, Portugal
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2015 - 2015	Desenvolvimento de exergames para a população idosa Supervisor	Licenciatura em Engenharia Informática (Degree) Universidade da Madeira, Portugal
2015 - 2015	Neurological Rehabilitation Project Supervisor	Licenciatura em Engenharia Informática (Degree) Universidade da Madeira, Portugal
2009 - 2009	Interactive scenarios for the rehabilitation of unilateral spatial neglect Co-supervisor	Interdisciplinary Master in Cognitive Systems and Interactive Media (Master) Universitat Pompeu Fabra, Spain Hospital de l'Esperança, Spain
2007 - 2007	HCI for physiological measurements Supervisor	Internship (Other) Universitat Pompeu Fabra, Spain

Committee member

Activity description Role	Institution / Organization
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2020/07/14 - Current	Member of the Ethics Committee of the University of Madeira Member	Universidade da Madeira, Portugal
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Conference scientific committee

Conference title	Conference host
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2020 - 2020	ICDVRAT 2020 - 13th International Conference on Disability, Virtual Reality and Associated Technologies	
2018 - 2018	ICDVRAT 2018 - 12th International Conference on Disability, Virtual Reality and Associated Technologies	
2017 - 2017	PhyCS 2017 - 4th International Conference on Physiological Computing Systems	
2017 - 2017	ICVR 2017 - International Conference on Virtual Rehabilitation	
2016 - 2016	PhyCS 2016 - 3rd International Conference on Physiological Computing Systems	
2016 - 2016	REHAB 2016 – 4th Workshop on ICTs for improving Patients Rehabilitation Research Techniques	

2016 - 2016	ICDVRAT 2016 - 11th International Conference on Disability, Virtual Reality and Associated Technologies
2015 - 2015	PhyCS 2015 - 2nd International Conference on Physiological Computing Systems
2015 - 2015	ICVR 2015 - International Conference on Virtual Rehabilitation
2015 - 2015	REHAB 2015 - 3rd Workshop on ICTs for improving Patients Rehabilitation Research Techniques
2014 - 2014	PhyCS 2014 - International Conference on Physiological Computing Systems
2014 - 2014	REHAB 2014 - 2nd Patient Rehabilitation Research Techniques Work-shop of the 8th International Conference on Pervasive Computing Technologies for Healthcare (PervasiveHealth 2014)
2014 - 2014	ICDVRAT 2014 - 10th International Conference on Disability, Virtual Reality and Associated Technologies
2013 - 2013	ICVR 2013 - International Conference on Virtual Rehabilitation
2013 - 2013	REHAB 2013 - Patient Rehabilitation Research Techniques Workshop of the 7th International Conference on Pervasive Computing Technologies for Healthcare (PervasiveHealth 2013)
2011 - 2011	ICVR 2011 - International Conference on Virtual Rehabilitation

Distinctions

Award

2016	Early Career Investigator Award International Society for Virtual Rehabilitation, Portugal
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Other distinction

2013	CMU Portugal Faculty Exchange Program Grant Fundação para a Ciência e a Tecnologia - Carnegie Mellon Portugal Program, Portugal
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2013

FCT Postdoctoral Grant (2012 call)

Fundação para a Ciência e a Tecnologia, Portugal
