

Miguel A. Guevara graduated in Mathematics from Institute of Higher Education Jose Marti, University of Camaguey, Cuba in 1987, completed a PhD degree in Technical Sciences at Institute of Cybernetics, Mathematics and Physics, Havana, Cuba in 1997 – Diploma recognized as equivalent to the European PhD degree in Computer Science Engineering at Faculty of Engineering, University of Porto, Portugal in 2013.

In a 28-years period (1988–2017) working as researcher in the field of computer science, he has got a deep expertise in areas such as digital image processing, pattern recognition, machine learning, data mining, computer vision and artificial intelligence. In Cuba, he was principal investigator in projects on several national programs for scientific research, such as: (1) Biotechnology; (2) Evolving Technologies in Neurobiology and Neuroinformatics; and (3) Fundamental Sciences. He has got a deep expertise (25 years) as computer science professor, teaching different disciplines, such as: Digital Signal and Image Processing, Artificial Intelligence, Algorithms and Data Structures, Programming Techniques, Programming Languages, Database Management Systems and Digital Systems. During a 7-years period (2001-2007) at University of Ciego de Avila (UNICA), Cuba he coordinated a Master of Science course in “Applied Computer Science Technologies”. He contributed decisively to the scientific development of the UNICA through: (1) in 2000 he founded the Faculty of Computer Science, being his Dean (Director) until 2002; and (3) in 2006, he founded the Centre for Advanced Technologies in Computer Science, being his Director until 2007. In 2005 he won the academic category of “Full Professor” and in 2006 he received the Cuban Education’s Medal conferred to Educators with 20-years of successful work.

In Portugal he won a position (2008-2013) as Senior Researcher at INEGI – Institute of Mechanical Engineering and Industrial Management, Faculty of Engineering, University of Porto, awarded by FCT (Portuguese Science Foundation), in a very competitive call (*Programa Ciência 2007*). At INEGI he was a principal investigator in two international projects aimed to the Development of Algorithms and Methods for Medical Image Analysis. In 2009, he established his own group – the BIOIDA (for Biomedical Image and Data Analysis) – a multidisciplinary group involving physicians and computer science researchers from Portugal and Spain. The main contributions at INEGI were: (1) The first Portuguese Breast Cancer Digital Repository (BCDR – see <http://bcdr.inegi.up.pt>), a comprehensive compilation of annotated breast cancer patients’ cases; (2) A framework to massively explore search spaces of machine learning classifiers; (3) New sets of image-based descriptors for mammography images; (4) Novel breast cancer diagnosis methods; and (5) A group of benchmarking datasets for exploring Breast Cancer CADx methods.

From June/2013 to June/2015, He was a Senior Researcher at IEETA, University of Aveiro, participating in the “Cloud Thinking” project, aimed to create a new set of solutions based in novel ICT technologies. Main objective scenarios were: Ambient Intelligence, Ambient Assisted Living, Personalized Information Retrieval, Personalized Medicine, Cooperative Robotic behaviour, and Real-Time Clinical Test Monitoring. In specific, he contributed to: (1) the development of new strategies for archiving and distribution of medical imaging modalities and vital signals repositories; and (2) Building state-of-the-art machine learning classifiers associating quantitative imaging features and clinical data to produce advanced breast cancer machine learning classifiers in mammography.

Presently, from September/2015 to date, he is a Senior Researcher and Development Coordinator of the Computer Vision, Interaction and Graphics Domain at the Computer Graphics Center, University of Minho, Portugal, where he is heading the applied research and innovation activities in areas such as: computer vision, human computer interaction, computer graphics, virtual and augmented reality, and visual analytics. Currently, he is coordinating and/or participating in several financed scientific research projects (national and European).

Summing up, he has published 33 articles in peer review journals, 4 books, 12 book chapters and 32 papers in cutting-edge conference proceedings. He participated as researcher in 30 national

and international scientific projects (20 as principal investigator) and also, he has been very active in promoting national and international academic and industrial links. He completed the supervision of 1 Postdoctoral student, 3 PhD students and 8 Master of Science students. He is a member in scientific associations, such as: Portuguese Association and International Association of Pattern Recognition, European Society of Radiology and the International Network Graphicsmedia.net.