

Biography

Luiz Velho is a full researcher and professor at IMPA - National Institute of Pure and Applied Mathematics and the leading scientist of VISGRAF Laboratory. He currently holds the following positions at IMPA: Member of the Scientific Activities Committee, and member of the Fiscal Council of the Patrimonial Endowment Fund. He was also a member of the Scientific Technical Council, the Informatics Commission and the Institutional Capacity Program Committee.

His academic background includes a bachelor's degree in Industrial Design at ESDI / UERJ, a specialisation in Computer Science at PUC-Rio, a master's degree in Computer Animation at MIT Media Laboratory, a Ph.D. in Computer Science at the University of Toronto (within the programs of Computer Graphics and Computer Vision) and postdoctoral degree in Applied Mathematics at IMPA.

He is one of the pioneers in the field of Computer Graphics in Brazil, having made the first computer animation film in the country in 1978. His multidisciplinary experience encompasses the fields of geometric modeling, data visualization, image processing, animation and multimedia. During the year of 1982 he was a visiting researcher at the National Film Board of Canada. From 1985 to 1987 he was systems engineer at the Fantastic Animation Machine in New York when he designed the company's three-dimensional animation and visualization system. From 1987 to 1991 he was the manager of R&D at Globograph, the company responsible for creating visual effects and simulation systems for Globo Network.

He was a visiting professor at the Courant Institute of Mathematical Sciences at New York University in 1994, was a guest scientist at Hewlett Packard's HP Imaging Research Laboratory in Palo Alto in 1995 and a visiting researcher at Microsoft Research Asia in 2002.

He has a research productivity grant at level 1A of CNPq, being the first researcher in the area of Visual Computing to reach this level in the Mathematics and Statistics Committee. His technical and scientific production is extensive, it includes more than 488 publications, among which 70 articles in scientific journals, 270 papers in conferences and 90 technical reports. He is the author of several books on computer graphics, geometric modeling and mathematical applications that are adopted in undergraduate and postgraduate courses worldwide. In addition, he is the author of 8 national and international patents.

His work in the scientific community has been quite comprehensive. He has been a member of the editorial board of several technical publications, including the renowned Computer Graphics Forum of Eurographics. He was a guest editor of the special issues in Computer Graphics of the Journal of the Brazilian Computing Society - JSBC and of Computer & Graphics. He organized several scientific events, including the SIACG 2002 - Ibero-American Symposium in Computer Graphics, the ICCV 2007 - International Conference on Computer Vision and Computer Graphics International 2007. He also participated in the program committee of over 230 conferences and events.

He has received numerous awards and honours in his career including the National Order of Scientific Merit of the Presidency of the Republic, the Honours Prize at the II Compaq Award for Computer Science, more than 32 awards for best technical paper, and 8 awards for best video at conferences and festivals. He stood out as the first Latin American researcher to join the SIGGRAPH Papers Committee in 1999, which is the most important international event in Computer Graphics and Interactive Techniques. He received 5 times the prestigious FAPERJ research grant of "Innovative Scientist of Rio de Janeiro" in 2004, 2007, 2009, 2012 and 2015. The leading role he plays in the community is reflected by the numerous invitations to be the keynote speaker for scientific events, such as SGP 2005 - Symposium of Geometry Processing, CNMAC 2006 - National Congress of Applied Mathematics, SBPC Congress 2006 - Brazilian Society for the Advancement of Science, SIBGRAPI 2007 - Symposium of Computer Graphics and Image Processing and ISMM 2007 - International Symposium of Mathematical Morphology WVC 2010 - Workshop on Computer Vision, and VFX 2015 - Visual Effects Rio.