

Yiorgos Chrysanthou, Professor, University of Cyprus

Address: Department of Computer Science • University of Cyprus • 75 Kallipoleos Str, P.O.Box. 20537
CY-1678 Nicosia • Cyprus • Tel + 357-22-892719 • Fax + 357-22-892701
yiorgos@ucy.ac.cy , <http://www.cs.ucy.ac.cy/~yiorgos>

WORK EXPERIENCE

- 2018 - today** Professor, Computer Science Department, University of Cyprus
- 2001 - 2018** Assistant & Associate Professor, Computer Science Department, University of Cyprus
- 1998 - 2001** Lecturer, Computer Science Department, University College London
- 1996 - 1998** Research Fellow, Computer Science Department, University College London
- Visiting researcher:** UCL (2013), SIAT, Chinese Academy of Sciences in Shenzhen (2009), University of Tel-Aviv & Hebrew Univ. of Jerusalem (1997), University of California at Berkeley (1992)

EDUCATION

- 1991 - 1996** **PhD** in Computer Science: “*Shadow Computation for 3D Interaction and Animation*”, Queen Mary and Westfield College (QMW), University Of London
- 1987 - 1990** **BSc** in Computer Science and Statistics, First Class Honours, QMW, University Of London

PROFESSIONAL ACTIVITIES

- Member of the Editorial Board of the Journals Computer Graphics Forum (2017-), Computers & Graphics (2011-) and Eastern Mediterranean Archaeology and Heritage Studies, (2011-2016).
- Review Editor for the Journal Frontiers in Robotics and AI, Virtual Environments specialty (2014-).
- Program Co-Chair for international conferences: MIG 2010, ECMS 2008, ACM VRST 2006, VAST/EGSGH 2004 & VAST STARS 2010, ACM VRST 2005, and STAR Reports for EG 2005.
- Invited speaker for VHCIE 2018, V-S Games 2017, TEDx Univ of Nicosia 2014, e-Learning Expo, Athens 2012, MIG 2009, City Modeling, Simulation & Vis 2008, MIG 2008, V-Crowds 2005.
- Member of the IPC for over 95 international conferences in the last few years, including Eurographics, EG Rendering Symposium, Pacific Graphics, IEEE VR etc.
- Organiser of 5 international conferences.
- An occasional referee for many of the journals and conferences in the wider Computer Graphics and Virtual Reality community.
- Evaluator for various funding bodies, national and international (including EU FP 7).
- External examiner for thirteen PhD students, in seven different countries.

PHD SUPERVISION

PhD advisor of the following students:

- 2020 (expected)** Marios Loizou on object segmentation
- 2019 (expected)** Haris Zacharatos on *Affect recognition in Computer Games*
- 2018 (expected)** Nikolas Ladas on *Illumination Neutrealisation*
- 2014** Marios Kyriakou, *Simulation of Virtual Crowds & their Contribution to Presence in Immersive VEs*
- 2014** Panagiotis Charalambous, *Data-Driven Techniques for Crowd Simulation and Evaluation*
- 2012** Athanasios Gaitatzis, *Interactive Diffuse Global Illumination Discretization Methods*

2010 Despina Michael, *Real-time High quality HDR Illumination & Tonemapped Rendering*

2007 Franco Tecchia, *IBR For Visualisation Of Crowds In Real-Time*, (co-supervised with Mel Slater)

INVOLVEMENT IN RESEARCH PROJECTS

Overall or local, coordinator for the following funded projects:

- **SCHEDAR - Safeguarding the Cultural HERitage of Dance through Augmented Reality**, JPI Cultural Heritage – Digital Heritage, 2018-2020
- **RISE - Research centre in Interactive media, Smart systems and Emerging technologies**, EU H2020-WIDESPREAD-2014-1-FPA-TEAMING – Phase 1, 2015-2016 & H2020-WIDESPREAD-01-2016-2017- Phase 2- 739578, 2017-2023, (Scientific coordinator)
- **Energy Efficient Graphics Algorithms for Mobile Devices**, Cyprus Research Promotion Foundation (RPF), 2013-2015
- **Visual Dance Performance for Interactive Characters**, Cyprus RPF, 2012-2014
- **Reconstruction of everyday life in the 19th century Nicosia**, Cyprus RPF, 2012-2014
- **A State-of-the-Art VR CAVE facility for the Advancement of Multi-Disciplinary Research & Development in Cyprus**, Cyprus RPF, 2012-2014
- **HDRi: The digital capture, storage, transmission and display of real-world lighting**, EU COST Action IC1005, 2011-2015
- **Mobile AR-Assisted Maintenance**. Cyprus RPF, 2010-2012
- **Illumination Neutralisation With Application in Tracking**. Cyprus RPF, 2010-2012
- **SIMPOL – Synthesis of Dynamic Characters with Mocap Data for Human Animation: Educating the Cyprus Police Force**, Cyprus RPF, 2009-2011
- **Cyprus Food Virtual Museum**, Cyprus RPF, 2009-2010
- **Mediterranean Harbors – Ships And The Sea: The Invisible Routes**, EU Interreg III B Archimed, 2009
- **SCOLIOSIS 2 – Experimental photogrammetric system for diagnosis of scoliosis**, Cyprus RPF, 2008-2010
- **SURFDATA – Surface reconstruction from unorganized datasets**, Cyprus RPF, 2008-2009
- **A VR Tour in Nicosia of the 19th Century**, The Leventis Municipal Museum, 2008-2009
- **SCOLIOSIS – Automatic photogrammetry methods for diagnosis and follow-up of scoliosis**, Cyprus RPF, 2005-2008
- **TONEMAP – High fidelity images for a VR system with application to military training**, Cyprus RPF, 2005-2007
- **KIKIPES – Avatar navigation and animation for large virtual environments**, Cyprus RPF, 2005-2007
- **INTUITION – Network of excellence on VR and VE applications for future workspaces**, EU IST, Framework 6, Network of Excellence, 2004-2008
- **REALISM – A framework for realistic avatars**, Cyprus RPF, 2004-2005
- **3D reconstruction of archaeological sites using Computer Graphics**, University of Cyprus, 2003
- **CREATE – Constructivist Mixed Reality for Design, Education, and Cultural heritage**, EU IST, Framework 5, 2002-2005
- **Navigation du Savoir project**, EU Euromed H II, 2002-2005
- **Real-time Rendering of Densely Populated Urban Environments**, EPSRC, UK, 2000-2001
- **3D Centre for Electronic Commerce**, DTI, UK and LINK, 2000-2002 (PI of the V Shopping WP)

PROFESSIONAL BODIES

- Member of ACM and ACM SIGGRAPH since 1997, of the European Association for Computer Graphics, since 1996 and IEEE Computer Society 1997-2011.
- Member of the executive committee of ICOMOS, Cyprus Chapter, 2006-2015.

SELECTED PUBLICATIONS

26 papers in international journals, 35 papers in reviewed international conferences, 16 book chapters, 10 edited volumes and special issues and 1 text book in computer graphics, virtual reality and cultural heritage - H-Index: 27, i10-index 54, Total citations: 3430 – source Google Scholar.

Aristidou A, Zeng Q, Stavrakis E, Yin K, Cohen-Or D, Chrysanthou Y, Chen B, “Emotion control of unstructured dance movements”. In Proceedings of the ACM SIGGRAPH/EG Symposium on Comp. Animation 2017 Jul 28 (p. 9).

A. Aristidou, Y. Chrysanthou and J. Lasenby, "Extending FABRIK with Model Constraints", Computer Animation and Virtual Worlds, 27:1, 35-57, January 2016.

Marios Kyriakou, Xueni Pan, and Yiorgos Chrysanthou, “Interaction with Virtual Crowds in Immersive and Semi-Immersive Virtual Reality Systems”, Computer Animation and Virtual Worlds, 10.1002/cav.1729, August (2016).

A. Aristidou, P. Charalambous, Y. Chrysanthou, “Emotion Analysis and Classification: Understanding the Performers' Emotions Using the LMA Entities”, Computer Graphics Forum, 34: 262–276, 2015.

A. Aristidou, E. Stavrakis, P. Charalambous, Y. Chrysanthou, S. Himona, “Folk Dance Evaluation Using Laban Movement Analysis”, ACM Journal on Computing and Cultural Heritage (JOCCH) 8 (4), 20, August 2015. (Best Paper Award at EG GCH 2015)

P. Charalambous and Y. Chrysanthou. The PAG Crowd: A Graph Based Approach for Efficient Data-Driven Crowd Simulation, accepted at Computer Graphics Forum, DOI: 10.1111/cgf.12403, June 2014.

P. Charalambous, I. Karamouzas, S. Guy, and Y. Chrysanthou. A Data-Driven Framework for Visual Crowd Analysis, Pacific Graphics (Computer Graphics forum), October 2014.

Zacharatos, H., Gatzoulis, C. and Chrysanthou, Y. “Automatic Emotion Recognition based on Body Movement Analysis: A Survey”, IEEE Comp. Graphics and Applications, Special Issue - The Next Big Thing, 34 (6), Nov 2014.

Zaharias, P., Michael, D. and Chrysanthou, Y. Learning through Multi-touch Interfaces in Museum Exhibits: An Empirical Investigation. Educational Technology & Society, 16 (3), 374–384, 2013.

G. Viguera, J.M. Orduna, M. Lozano, and Y. Chrysanthou, A Distributed Visualization System for Crowd Simulations, Journal of Integrated Computer-Aided Engineering, 18:4, 2011.

L. Yangyan, W. Xiaokun, Y. Chrysanthou, A. Sharf, D. Cohen-Or and N. Mitra, “GlobFit: Consistently Fitting Primitives by Discovering Global Relations”, In ACM Transactions on Graphics (SIGGRAPH), 30 (4), p. 52, 2011.

A. Lerner, Y. Chrysanthou, A. Shamir and D. Cohen-Or. Context-Dependent Crowd Evaluation. Pacific Graphics (Computer Graphics Forum Journal), China, September 2010.

A. Lerner, Y. Chrysanthou and D. Lischinski. Crowds by Example. Computer Graphics Forum, 26(3):655--664, September 2007.

D. Cohen-Or, Y. Chrysanthou, C. Silva and F. Durant. A Survey of Visibility for Walk-through Applications. IEEE TVCG Journal, Vol 9, No 3, July-September 2003, 412-431.

Franco Tecchia, Celine Loscos and Yiorgos Chrysanthou. Visualizing Crowds in Real-Time. Computer Graphics forum, Volume 21, Number 4, pp 753-765, December 2002.

Franco Tecchia, Celine Loscos and Yiorgos Chrysanthou. Image-Based Crowd Rendering. IEEE Computer Graphics and Applications, Volume 22, Number 2, pp 36-43, March-April 2002.

T. Vassilev, B. Spanlang and Y. Chrysanthou. Cloth Modelling for Real-time Animation, Computer Graphics Forum 20(3), 2001.

BOOK - M. Slater, A. Steed and Y. Chrysanthou. Computer Graphics and Virtual Environments: From Realism to Real-Time. ISBN 0-201-62420-6, 2001, Addison Wesley Publishers. (Also published in Chinese by Addison Wesley & China Machine Press 2004)

Patents

With A. Artusi, B. Roch and A. Chalmers. "Selective Tone Mapper", UK Patent Office. UK Patent Office. patent number GB2449272. 19 November 2008.

With T. Vassilev and B. Spanlang. “Method for dressing and animating synthetic characters”, Patent number 02749121.6-2218-GB 0203632, 8 August 2002.

With Buxton B. F., Lawrence K. D., Spanlang B., Vassilev T. I., Thompson G., Goonatilake S. A., Treleaven P. C., Walters J. “System And Method For Visualizing Personal Appearance”. Patent number: WO2000GB04990 20001222, 28 July 2001.