

Curriculum Vitae

Personal Information

Name: Paul Guerrero
Academic Degree: Dr. techn. (equiv. PhD)
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Email: paulaugguerrero@gmail.com, paul.guerrero@ucl.ac.uk
Website: <http://paulguerrero.github.io/>
Date of birth: June 10, 1981 in Vienna, Austria
Marital Status: Single
Languages: German, English, Spanish
Main research areas: Shape/Pattern Modeling and Analysis, Computer Graphics, Machine Learning

Education

May 2008 – November 2014 PhD candidate at Vienna University of Technology, Department of Computer Graphics and Algorithms.
Graduation as Dr. techn. (Thesis: “Edit Propagation using Geometric Analogies”) in November 2014
2000 – 2007 Studies in Computer Science at Vienna University of Technology, Austria, with special emphasis on Computer Graphics
Graduation as “Diplom-Ingenieur” from Vienna University of Technology (Thesis: “Approximative Real-time Soft Shadows and Diffuse Reflections in Dynamic Scenes”) in October 2007
December 2005 Participation in the “2005 UCSB International Capture The Flag” (iCTF) Internet Security Contest, team got 2nd place (best defensive performance)
1991 – 2000 Secondary School (Gymnasium) in Burghausen (Germany), Albany, N.Y. (USA) and Bogotá (Colombia)
Colombian Graduation (ICFES) in 1999 and German Graduation (Abitur) in 2000

Professional

July 2015 – present Post-Doc (Research Associate) at University College London, Smart Geometry Processing Group
February 2019 – March 2019 Visiting Post-Doc at Stanford University, Palo Alto, CA
November 2014 – June 2015 Visiting Post-Doc at KAUST, Saudi Arabia
November 2013 – June 2014 Visiting PhD student at KAUST, Saudi Arabia
October 2012 – June 2013 Visiting PhD student at KAUST, Saudi Arabia
July 2010 Lecturer at the Summer School 2010 at the UCI in Cuba
October 2009 – June 2011 Organizer of a Seminar on Methodical Working and Lecturer at a Seminar on Computer Graphics at Vienna University of Technology
October 2009 Co-Organizer of a Joint Seminar on Visual Computing in Moscow
May 2008 – May 2012 University Assistant at Vienna University of Technology, Department of Computer Graphics and Algorithms
March 2006 – Oct 2006 Internship at Vienna University of Technology, Department of Computer Graphics and Algorithms
July 2005 – March 2006 Internship at Vienna University of Technology, Department of Pattern Recognition and Image Processing
2004 – 2006 Work on a freeware game (Max-Fighter by Musgit Games), released under the GNU General Public License
1996-2007 Design and creation of various webpages

Publications

- MO, K.*, GUERRERO, P.*, YI, L., SU, H., WONKA, P., MITRA, N. J. AND GUIBAS, L. – StructureNet: Hierarchical Graph Networks for 3D Shape Generation. (*submitted to SIGGRAPH Asia 2019*) (*joint first authors)
- GUERRERO, P., KELLY, T., WONKA, P., GUIBAS, L. AND MITRA, N. J. – Dual Domain GAN for Layout Generation. (*planned TOG resubmission from SIGGRAPH 2019*)
- MONSZPART, A., GUERRERO, P., CEYLAN, D., YUMER, E., AND MITRA, N. J. – iMapper: Interaction-guided Joint Scene and Human Motion Mapping from Monocular Videos. *ACM Trans. Graph.*, (to appear), SIGGRAPH 2019
- RAKOTOSAONA, M.J., LA BARBERA V., GUERRERO, P., MITRA, N. J., AND OVSJANIKOV M. – POINTCLEANNET: Learning to Denoise and Remove Outliers from Dense Point Clouds. *Computer Graphics Forum*, (to appear), 2019
- KELLY, T.*, GUERRERO, P.*, STEED, A., WONKA, P., AND MITRA, N. J. – FrankenGAN: Guided Detail Synthesis for Building Mass-Models Using Style-Synchronized GANs. *ACM Trans. Graph.*, 37, 6, Article 216 (Nov. 2018), SIGGRAPH Asia 2018 (*joint first authors)
- GUERRERO, P., KLEIMAN, Y., OVSJANIKOV, M. AND MITRA, N. J. – PCPNet: Learning Local Shape Properties from Raw Point Clouds. *Computer Graphics Forum*, 37, 2, 75-85 (May 2018), EUROGRAPHICS 2018
- GUERRERO, P., WINNEMÖLLER, H., LI, W., AND MITRA N. J. – DepthCut: improved depth edge estimation using multiple unreliable channels. *The Visual Computer*, 34, 9, 1165-1176 (September 2018), CGI 2018
- HECHER, M., GUERRERO, P., WONKA, P., WIMMER, M. – How Do Users Map Points Between Dissimilar Shapes? *IEEE Trans. on Visualization and Computer Graphics*, 24, 8, 2327-2338 (August 2018)
- KAMEL BOULOS, M., LU, Z., GUERRERO, P., JENNETT, C. AND STEED, A. – From urban planning and emergency training to Pokémon Go: applications of virtual reality GIS (VRGIS) and augmented reality GIS (ARGIS) in personal, public and environmental health. *Int. Journal of Health Geographics* (February 2017)
- JENNETT, C., COX, A., GUERRERO, P., STEED, A., MITRA, N. J. – Designing for Curiosity in Citizen Science. *Workshop at CHI 2017*
- GUERRERO, P., BERNSTEIN, G., Li, W. AND MITRA, N. J. – PATEX: Exploring Pattern Variations. *ACM Trans. Graph.*, 35, 4, Article 48 (July 2016), SIGGRAPH 2016
- GUERRERO, P., MITRA N. J., AND WONKA, P. – RAID: A Relation-Augmented Image Descriptor. *ACM Trans. Graph.*, 35, 4, Article 46 (July 2016), SIGGRAPH 2016
- ZHAO, X., HU, R., GUERRERO, P., MITRA, N. J. AND KOMURA, T. – Relationship templates for creating scene variations. *ACM Trans. Graph.*, 35, 6, Article 207 (November 2016), SIGGRAPH Asia 2016
- LU, Z., GUERRERO, P., MITRA N. J., AND STEED, A. – Open3D: Crowd-Sourced Distributed Curation of City Models. *Proceedings of Web3D 2016*, WEB3D 2016
- GUERRERO, P., JESCHKE, S., WIMMER, M. AND WONKA, P. – Learning Shape Placements by Example. *ACM Trans. Graph.*, 34, 4, Article 108 (August 2015), SIGGRAPH 2015
- GUERRERO, P., JESCHKE, S., WIMMER, M. AND WONKA, P. – Edit Propagation using Geometric Relationship Functions. *ACM Trans. Graph.*, 33, 2, Article 15 (April 2014), presented at SIGGRAPH 2014
- GUERRERO, P., AUZINGER, T., WIMMER, M. AND JESCHKE, S. – Partial Shape Matching using Transformation Parameter Similarity. *Computer Graphics Forum*, 34, 1, 239–252 (Feb. 2015), presented at EUROGRAPHICS 2016
- GUERRERO, P., JESCHKE, S., AND WIMMER, M. – Real-time Indirect Illumination and Soft Shadows in Dynamic Scenes using Spherical Lights. *Computer Graphics Forum*, 27, 8, 2154–2168 (Oct. 2008)

Courses and Posters

- MITRA, N. J., KOKKINOS, I., GUERRERO, THUREY, N., LEONIDAS, G. – CreativeAI: Deep Learning for Graphics, *Siggraph 2019 Courses* (to appear), July 2019, <http://geometry.cs.ucl.ac.uk/creativeai/>
- MITRA, N. J., KOKKINOS, I., GUERRERO, THUREY, N., RITSCHER, T. – CreativeAI: Deep Learning for Graphics, *Siggraph Asia 2018 Courses*, December 2018, <http://geometry.cs.ucl.ac.uk/creativeai/>
- MITRA, N. J., KOKKINOS, I., GUERRERO, P., KIM, V., REMATAS, K., RITSCHER, T. – Deep Learning for Graphics, *Eurographics 2018 Courses* (full day), May 2018, <http://geometry.cs.ucl.ac.uk/dl4g/>
- GUERRERO, P., WINNEMÖLLER, H., LI, W., AND MITRA N. J. - DepthCut: Improved Depth Edge Estimation using Multiple Unreliable Channels. SGP 2017 Posters

Program Committee Member

CVM 2017, CVM2018, SGP 2017, SGP 2018, Siggraph Asia 2018 Courses, SGP 2019, VMV 2019, EG 2019 Short Papers

Reviewing Activities

Regular reviewer for SIGGRAPH, SIGGRAPH Asia, Eurographics, SGP, Pacific Graphics, TVCG, CGI, CVM, TVCJ, and occasional reviewer for several other journals and conferences.

Teaching

- Lecturer at the Summer School 2019 at Shenzhen University, China
- Advisor for 3 master theses (Aaron Meier-Stauffer, Marie-Anne Lachaux, Mayalen Etcheverry) and several student projects
- Assistant for the 2018 UCL Computer Graphics Course
- Seminar on Methodical Scientific Working – Winter 2009, Summer 2010, Winter 2010, Summer 2011
- Advanced Seminar on Global Illumination – Summer 2010
- Course on Interactive Global Illumination at the Summer School 2010 at UCI, Cuba (2 weeks)
- Various teaching sessions for shape modeling courses and an introductory computer graphics courses