

Honghua Li

Ph.D. Candidate

School of Computing Science

Simon Fraser University

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Research Interests

- Geometry Processing Shape optimization, Segmentation, Topology blending, etc.
- Style Analysis Style-content separation, Style transfer

Education

- **Simon Fraser University** Burnaby, Canada
Ph.D. Candidate in Computing Science *Sep. 2010 - Present*
 - Focus: shape analysis, style analysis, geometry processing
 - Supervisor: Dr. Hao(Richard) Zhang
 - Co-supervisor: Dr. Daniel Cohen-Or
 - GPA: 4.0/4.3
- **National University of Defense Technology** Changsha, China
Master Program in Computing Science *Sep. 2008 - Jan. 2010*
 - Promoted to Ph.D. program w/o M.Eng degree (an honor for top 8% students)
 - Supervisor: Dr. Shiyao Jin
- **National University of Defense Technology** Changsha, China
B.Sc. in Computing Science *Sep. 2004 - Jul. 2008*
 - Thesis: 3D Point Clouds Editing Based on Parameterization
 - Supervisor: Dr. Shiyao Jin
 - GPA: 3.78/4.0

Work Experience

- **Simon Fraser University** Burnaby, Canada
Research Assistant (Supported by iWonder Inc.) *Sep. 2012 - Dec. 2012*
 - Topics: iOS app development, 3D interaction for shape assembly
 - Faculty: Hao(Richard) Zhang
- **Simon Fraser University** Burnaby, Canada
Teaching Assistant *Sep. 2010 - Aug. 2012*
 - Courses: Data Structure, Intro. to Computer Architecture, Intro. to Computer Graphics
 - Faculty: David G. Mitchell, Tony Dixon, Hao Zhang, Ping Tan

Technical Skills

- **Proficient** (used on daily basis for large projects)
C++, Matlab, Qt, OpenGL, L^AT_EX, 3ds Max, Key Shot
- **Competent** (moderate-sized projects): C, Objective C, PHP, HTML
- **Familiar** (small programs): Python, Java, Maya

Awards & Honors

- SFU President's PhD Scholarship Aug. 2014
- Travel and Minor Research Award, SFU Mar. 2014
- Runner-up of FAS Faculty Heat of 3MT Competition, SFU Feb. 2014
- SFU Graduate Fellowship Jan. 2013
- Travel and Minor Research Award, SFU Dec. 2012
- SFU Graduate Fellowship Sep. 2012
- SFU Graduate Fellowship Sep. 2011
- Bronze Medal of Graduate English Debating Competition at NUDT 2009
- NUDT Fund of Innovation (< 3%) 2009
- Bronze Medal of Undergraduate Contest in Computer Works, Hunan 2008
- Galaxy First-Class Scholarship (< 2%), CS, NUDT 2008
- Galaxy Second-Class Scholarship (< 2%), CS, NUDT 2007
- Second Prize of Mathematic Contest in Modeling, Hunan Zone 2006
- Outstanding Student, CS, NUDT 2005-2009

Research Publications

- [1] Ruizhen Hu, **Honghua Li**, Hao Zhang and Daniel Cohen-Or, "Approximate Pyramidal Shape Decomposition", *ACM Transactions on Graphics* (SIGGRAPH Asia 2014), 33(6).
- [2] Ibraheem Alhashim, **Honghua Li**, Kai Xu, Junjie Cao, Rui Ma, Hao Zhang, "Topology-Varying 3D Shape Creation via Structural Blending", *ACM Transactions on Graphics* (SIGGRAPH 2014), 33(4).
- [3] **Honghua Li**, Hao Zhang, Yanzhen Wang, Junjie Cao, Ariel Shamir and Daniel Cohen-Or, "Curve Style Analysis in a Set of Shapes", *Computer Graphics Forum* (presented on Eurographics 2014), 32(6), 77-88, 2013.
- [4] **Honghua Li**, Ibraheem Alhashim, Hao Zhang, Ariel Shamir and Daniel Cohen-Or, "Stackabilization", *ACM Transactions on Graphics* (SIGGRAPH Aisa 2012), 31(6).
- [5] Kai Xu, **Honghua Li**, Hao Zhang, Daniel Cohen-Or, Yueshan Xiong, and Zhi-Quan Cheng, "Style-Content Separation by Anisotropic Part Scales", *ACM Transactions on Graphics* (SIGGRAPH Aisa 2010), 29(5).

- [6] Z.-Q. Cheng, W. Jiang, G. Dang, R. Martin, J. Li, **H. Li**, Y. Chen, Y. Wang, B. Li, K. Xu, S. Jin. “Non-rigid Registration in 3D Implicit Vector Space”, in Proc. of *Shape Modeling International*, Aix-en-Provence, France, 2010.
- [7] Jun Li, Zhiquan Cheng, **Honghua Li**, Shiyao Jin, “An algorithm of Laplacian-based 3D surface registration,” *Journal of System Simulation*, Vol. 21 Suppl. 1, pp. 113-117, 2009. (In Chinese)
- [8] **Honghua Li**, Zhiquan Cheng, Jun Li, Shiyao Jin, “Mesh Dense Correspondence Computation based on Harmonic Field,” *Journal of System Simulation*, Vol. 21 Suppl. 1, pp. 6-9, 2009. (In Chinese)
- [9] **Honghua Li**, Zhiquan Cheng, Jun Li, Shiyao Jin, “3D Surface Correspondence based on SIFT Features of Depth Image,” *Journal of System Simulation*, Vol. 21 Suppl. 1, pp. 15-19, 2009. (In Chinese)

Academic Talks

- **Eurographics 2014** Strasbourg, France
Curve style analysis in a set of shapes
- **Siggraph Asia 2012** Singapore
Stackabilization

References

- **Hao (Richard) Zhang** haoz@cs.sfu.ca
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- **Daniel Cohen-Or** dcor@tau.ac.il
Tel Aviv University
- **Ariel Shamir** arik@idc.ac.il
Interdisciplinary Center
- **Ping Tan** pingtan@sfu.ca
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