Binh-Son Hua

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Education

Ph.D. School of Computing, National University of Singapore, Singapore, 2015. B.E. (Hons.). Computer Science and Engineering, Ho Chi Minh City University of Technology, Vietnam, 2008.

Publications/Presentations

Google Scholar DBLP

- 1. <u>Binh-Son Hua</u>, Adrien Gruson, Derek Nowrouzezahrai, and Toshiya Hachisuka, Gradient-Domain Photon Density Estimation, Eurographics 2017.
- 2. Duc Thanh Nguyen, <u>Binh-Son Hua</u>*, Lap-Fai Yu, and Sai-Kit Yeung, (* co-first author) A Robust 3D-2D Interactive Tool for Scene Segmentation and Annotation, IEEE TVCG 2017 (IF: 2.840)
- 3. <u>Binh-Son Hua</u>, Quang-Trung Truong, Minh-Khoi Tran, Quang-Hieu Pham, Lap-Fai Yu, Duc Thanh Nguyen, and Sai-Kit Yeung, SHREC'17: RGB-D to CAD Retrieval with ObjectNN Dataset, Eurographics Workshop on 3D Object Retrieval 2017.
- 4. <u>Binh-Son Hua</u>, Quang-Hieu Pham, Duc Thanh Nguyen, Minh-Khoi Tran, Lap-Fai Yu, and Sai-Kit Yeung, SceneNN: a Scene Meshes Dataset with aNNotations, 3DV 2016 (*Best Paper Honorable Mention*).
- 5. Binh-Son Hua and Kok-Lim Low,
 - Guided path tracing using clustered virtual point lights, SIGGRAPH Asia 2015 Posters Program.
- 6. Binh-Son Hua, Imari Sato, and Kok-Lim Low,
 - Direct and Progressive Reconstruction of Dual Photography Images, ICIP 2013.
- 7. <u>Binh-Son Hua</u>, Tian-Tsong Ng, and Kok-Lim Low,
 - Reconstruction of Depth and Normals from Interreflections, ICIP 2013 (Oral presentation).
- 8. Binh-Son Hua and Kok-Lim Low,
 - Interactive Motion Deblurring Using Light Streaks, ICIP 2011.
- 9. Duc Thanh Nguyen, <u>Binh-Son Hua</u>, Minh-Khoi Tran, Quang-Hieu Pham, and Sai-Kit Yeung, A Field Model for Repairing 3D Shapes, CVPR 2016 (Spotlight presentation).
- 10. Ramanpreet Pahwa, Minh Do, Tian Tsong Ng, and <u>Binh-Son Hua</u>, Calibration of Depth Cameras Using Denoised Depth Images, ICIP 2014.
- 11. Li Shen, Chuohao Yeo, and <u>Binh-Son Hua</u>,
 - Intrinsic Image Decomposition Using a Sparse Representation of Reflectance, TPAMI 2013.
- 12. Lei Wang, <u>Binh-Son Hua</u>, and Xueqing Li, Adaptive Energy Diffusion for Blind Inverse Halftoning, PCM 2010.

Professional Activities

Reviewer: Eurographics 2017; Pacific Graphics 2017; PLOS ONE 2016; WSCG 2016; CGI 2015. Sub-reviewer: SIGGRAPH 2016; SIGGRAPH Asia 2017, 2015; 3DV 2015-2016; Pacific Graphics 2016; ACCV 2016; TCSVT 2017, 2016; VCIP 2017.

Work Experience

Postdoctoral Researcher	Singapore University of Technology and Design	Dec 2016 - present
Postdoctoral Researcher	Singapore University of Technology and Design	Jun 2015 - Jan 2016
Research Assistant	National University of Singapore	Jan 2015 - Apr 2015
Teaching Assistant	National University of Singapore	Feb 2013 - Dec 2014
Intern	Institute for Infocomm Research, Singapore	Mar 2011 - Aug 2012
Project: Geometry from interreflection in light transport, supervised by Dr. Ng Tian Tsong.		
Intern	National Institute of Informatics (NII), Japan	Jul 2010 - Dec 2010
Project: Light transport acquisition, supervised by Prof. Imari Sato.		
Intern	G3 Lab, National University of Singapore	Jun 2008 - Dec 2008

Project: Motion deblurring, supervised by Dr. Low Kok Lim.

Intern National University of Singapore Aug 2007 - Dec 2007

Final year project: Secure information flow analysis, supervised by Prof. Khoo Siau Cheng.

Teaching Experience

Teaching Assistant	Advanced Computer Animation	Jan 2015

3D Modeling and Animation Jan 2015 Feedback
Software Systems Design Aug 2014, Aug 2013 Feedback
Programming Methodology Jan 2014 Feedback
Data Structures and Algorithms I Jan 2013 Feedback

Software Engineering Jan 2013

JavaScript, HTML, C++ programming Aug 2014, Aug 2013

(at National Junior College, Singapore)

Guest Lecturer Fluid Simulation Mar 2015

HTML5 and JavaScript Sep 2014

Tutor Graphics Rendering Techniques Jan 2012, Jan 2011, Jan 2010

General Purpose Computation on GPU Aug 2011

Co-supervised Students

Le Hoang Quyen	Master thesis, 2014	Real-time caustics rendering
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Cui Yingchao Bachelor thesis, 2013 Photon mapping

Ana-Delia Sambotin Master thesis, 2012 Interreflection reconstruction

Language Proficiency

Japanese	Japanese Language Proficiency Test	N1	Jul 2016
	Japanese Language Proficiency Test	N2	Dec 2010
English	TOEFL iBT	99	Dec 2007
	IELTS Academic	7.5	Jul 2007

Chinese (Mandarin, Cantonese, Teochew, almost native), Vietnamese (native) and French (beginner).

Awards

PhD research scholarship	National University of Singapore	Jan 2009 - Dec 2012
Second runner-up	Samsung Mobile Games 2005, Vietnam	Jun 2005 - Nov 2005

Other Activities

Graphics developer	Ephere Inc.	May 2016 - Jun 2016
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Student volunteer SIGGRAPH Asia 2009, Yokohama, Japan Dec 2009

Software developer VietCore Co., HCMC, Vietnam Mar 2008 – Jun 2008

Project: Frustrated Total Internal Reflection (FTIR) multi-touch display.

Intern FPT Software Solution, HCMC, Vietnam Jul 2006 - Oct 2006

Game developer FPT Mobile, HCMC, Vietnam Feb 2006

Programming Skills

C/C++, CUDA, OpenGL, GLSL, Python, C#, Java, MATLAB, HTML5/JavaScript.
Caffe, Torch, TensorFlow, OpenCV, Qt, Unity, Maya, Blender, Linux, and Mac OS X.

Latest update: Aug 04, 2017.