

Daniel Hui Jun Chung (MR)



Course: PhD (Building)

Supervisor: Professor WONG Nyuk Hien

Research Areas: Anthropogenic heat, urban climate, ventilation, pollutant dispersion, urban morphology

Qualifications:

- Bachelor (Hons) Architecture, NUS, 2005
- Masters of Art (Architecture), NUS, 2007
- EC-Council Ethical Hacking and Countermeasures (CEHv6), Score: 94%, 2010
- Apply Engineering Simulation Fundamentals, Professional Engineers Board, Singapore, 2012
- Perform CFD Simulation For Design Verification, Professional Engineers Board, Singapore, 2012
- Perform Structural Simulation for Design Verification, Professional Engineers Board, Singapore, 2013
- Perform Engineering Simulation for Built Environment and HVAC Design, Professional Engineers Board, Singapore, 2013 (Upcoming)

Awards:

PhD Research Scholarship, NUS, 2012 - Present

Masters Research Scholarship, NUS, 2005 - 2007

Employment History / Work Experience:

- **Research Assistant, Augmented Reality Research, Interactive Multimedia Laboratory, Department of Electrical and Computer Engineering, NUS, 2007 - 2009**
- **Research Assistant, High Density Threshold Studies, Centre for Sustainable Asian Cities, SDE, 2009 - 2013**

Publications:

Conference:

- Tan, Beng Kiang, **Hii, Jun Chung Daniel**: 2007, *Optimising real-time virtual reality presentation*, CAADRIA 2007: Proceedings of the 12th International Conference on Computer-Aided Architectural Design Research in Asia, Southeast University, Nanjing, China, 2007, 599-606.
- Tan, Beng Kiang, **Hii, Jun Chung Daniel**: 2007, *Integrating Advanced Shader Technology For Realistic Architectural Virtual Reality Visualization*, CAADFutures 2007: Proceedings of the 12th International Conference on Computer-Aided Architectural Design Futures, The University of Sydney, Sydney, Australia, 2007, 431-443.
- Tan, Beng Kiang, **Hii, Jun Chung Daniel**: 2008, *The Acceptable Visual Quality of Stereoscopic Virtual Reality Architectural Visualisation*, CAADRIA 2008: Proceedings of the 13th International Conference on Computer Aided Architectural Design Research in Asia, Chiang Mai, Thailand, April 2008, 579-586.
- Zhou, ZhiYing, Karlekar, Jayashree, Schneider, Miriam, **Hii, Jun Chung Daniel**, Lu, Weiquan: 2009, *Robust Pose Estimation for Outdoor Mixed Reality with Sensor Fusion*, HCI International 2009, Springer, San Diego, CA, USA, 281-289.
- **Hii, Jun Chung Daniel**, Zhou, ZhiYing, Karlekar, Jayashree, Schneider, Miriam, Lu, Weiquan: 2009, *Mobile Augmented Reality For Past and Future Visualizations*, CAADFutures 2009: Proceedings of the 13th International Conference on Computer-Aided Architectural Design Futures, University of Montreal, Montreal, Canada, 557-571.
- Karlekar, Jayashree, Zhou, ZhiYing, Lu, Weiquan, Nakayama, Yuta, **Hii, Jun Chung Daniel**: 2009, *Robust Statistical Sensor Fusion for Outdoor Augmented Reality*, ISMAR2009, Orlando, Florida, USA, 281-289.
- **Hii, Jun Chung Daniel**, Malone-Lee Lai Choo: 2010, *Computational Fluid Dynamics for Urban Design*, CAADRIA2010, Hong Kong, 357-366.
- Karlekar, Jayashree, Zhou, ZhiYing, Lu, Weiquan, Loh, Zhi Chang, Nakayama, Yuta, **Hii, Jun Chung Daniel**: 2010, *Positioning, Drift-free Tracking and*

Mapping for Outdoor Augmentation, ISMAR 2010, Seoul, South Korea, 175-184.

- Karlekar, Jayashree, Zhou, ZhiYing, Nakayama, Yuta, Lu, Weiquan, Loh, Zhi Chang, **Hii, Jun Chung Daniel**: 2010, *Model-Based Localization and Drift-Free User Tracking for Outdoor Augmented Reality*, ICME 2010, Singapore, 1178-1183.
- Zhang, Ji, Heng, Chye Kiang, **Hii, Jun Chung Daniel**, Janssen, Patrick, Malone-Lee, Lai Choo, Tan, Beng Kiang: 2010, *Evaluating the Environmental Implications of Density: A comparative case study on the relationship between density, urban block typology and Sky View Factor performance*, Proceedings of the 28th eCAADe Conference, 2010, ETH Zurich, Switzerland, 515-527.
- **Hii, Jun Chung Daniel**, Heng, Chye Kiang, Malone-Lee Lai Choo, Zhang, Ji, 2011, *Analyzing the Ventilation Performance of Tropical High Density Residential Precincts using Computational Fluid Dynamics*, The 14th International Conference on Computer Aided Architectural Design futures, Liege, Belgium, 351-366.
- **Hii, Jun Chung Daniel**, Zhang, Ji, Heng, Chye Kiang, Malone-Lee Lai Choo, Janssen, Patrick, Huang, Yi Chun, 2011, *Total solar insolation per gross floor area as an environmental performance evaluation of high density precincts*, Building Simulation 2011, November 2011, Sydney, Australia, 2595-2602.
- Zhang, Ji, Heng, Chye Kiang, Malone-Lee, Lai Choo, Huang, Yi Chun, Janssen, Patrick, **Hii, Jun Chung Daniel**, Nazim, Ibrahim, 2012, *Preliminary Evaluation of A Daylight Performance Indicator for Urban Analysis: Facade Vertical Daylight Factor per Unit Floor Area*, SimBuild 2012, Madison, USA.

Book Chapter:

- Karlekar, Jayashree, **Hii Jun Chung, Daniel**, Zhou, ZhiYing, Lu, Weiquan, Nakayama, Yuta: 2010, *Mixed Reality on Mobile Devices*. In User Interfaces, IN-TECH, Vienna.

Journal:

- Ji Zhang, Heng, Chye Kiang, Malone-Lee, Lai Choo, **Hii Jun Chung, Daniel**, Janssen, Patrick, Leung, Kam Shing, Tan, Beng Kiang, 2012, *Evaluating Environmental Implications of Density: A comparative case study on the relationship between density, urban block typology and sky exposure*, Automation in Construction, 22 (2012), 90-101.
- **Hii, Jun Chung Daniel**, Malone-Lee, Lai Choo, 2011, *Computational Fluid Dynamics for Urban Design: The Prospects for Greater Integration*, International Journal of Architectural Computing, 9 (1), March 2011, 33-54.
- Karlekar, Jayashree, Zhou, ZhiYing, Lu, Weiquan, Loh, Zhi Chang, Nakayama, Yuta, **Hii, Jun Chung Daniel**, *User Positioning and Tracking in Dynamic Urban Environments*, IEEE Transactions on Multimedia (under review)

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