

# Wei Cheng

## *Curriculum Vitae*

**Contact**                      Department of Computer Science  
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## **Research Interests**

System support for multimedia applications, especially in streaming 3D models over network and distributed virtual environment. My other research interests include Computer Graphics, Distributed System, Peer-to-Peer System, and Concurrent Programming.

**Education**                      *Ph.D., Computer Science*, Est. Mar 2010  
National University of Singapore  
Singapore  
  
*M.Eng, Communication Science and Engineering*, 2005  
Fudan University  
Shanghai, China  
  
*B.Eng, Civil Engineering*, 1996  
Tongji University  
Shanghai, China

**Honors**                              *Dean's Graduate Research Excellence Award*  
School of Computing, NUS, 2009  
  
*Best Paper Award, ACM Multimedia 2008*  
ACM Multimedia 2008

## **Teaching Experience**

8/2009–current	Part Time Teaching Assistant
8/2008–11/2008	Part Time Teaching Assistant
8/2007–11/2007	Part Time Teaching Assistant National of University of Singapore
9/2003–01/2004	Part Time Teaching Assistant Fudan University, China

## Employment

- 6/2005–7/2005 Intern  
Alcatel Shanghai Bell Inc.  
Shanghai, China
- 7/1996–9/2001 Civil Engineer  
East China Civil Aviation Airport Design Institute  
Shanghai, China

## Publications

### Journal Papers

- Wei Cheng, Wei Tsang Ooi, Sebastien Mondet, Romulus Grigoras, and Geraldine Morin. Modeling progressive mesh streaming: Does data dependency matter? *accepted by ACM Transactions on Multimedia Computing, Communications, and Applications(TOMCCAP)*.
- Sebastien Mondet, Wei Cheng, Geraldine Morin, Romulus Grigoras, Frederic Boudon, and Wei Tsang Ooi. Compact and progressive plant models for streaming in networked virtual environments. *ACM Transactions on Multimedia Computing, Communications, and Applications(TOMCCAP)*, 5(3):21:1–22, 2009.
- Hang Yu, Ee-Chien Chang, Wei Tsang Ooi, Mun Choon Chan, and Wei Cheng. Integrated optimization of video server resource and streaming quality over best-effort network. *IEEE Transactions on Circuits and Systems for Video Technology (IEEE TCSVT)*, 19(3):374–385, 2009.

### Conference Papers

- Wei Cheng, Dan Liu, and Wei Tsang Ooi. Peer-assisted view-dependent progressive mesh streaming. In *Proceedings of ACM MULTIMEDIA '09*, Beijing, China, October 2009.
- Ransi De Silva, Wei Cheng, Dan Liu, Wei Tsang Ooi, and Shengdong Zhao. Towards characterizing user interaction with progressively transmitted 3D meshes (short paper). In *Proceedings of ACM MULTIMEDIA '09*, Beijing, China, October 2009.
- Sebastien Mondet, Wei Cheng, Geraldine Morin, Romulus Grigoras, Frederic Boudon, and Wei Tsang Ooi. Streaming of plants in distributed virtual environments. In *Proceeding of ACM MULTIMEDIA'08*, Vancouver, BC, Canada, October 2008.
- Wei Cheng. Streaming of 3D progressive meshes. In *Proceedings of ACM MULTIMEDIA '08 (Doctoral Symposium Abstract)*, Vancouver, BC, Canada, October 2008.
- Wei Cheng and Wei Tsang Ooi. Receiver-driven view-dependent streaming of progressive mesh. In *Proceedings of NOSSDAV'08*, Braunschweig, Germany, May 2008.
- Wei Cheng, Wei Tsang Ooi, Sebastien Mondet, Romulus Grigoras, and Géraldine Morin. An analytical model for progressive mesh streaming. In *Proceedings of ACM MULTIMEDIA '07*, pages 737–746, Augsburg, Germany, September 2007.

## Memberships and Activities

- 2008–present ACM Student Member
- 2008–present IEEE Graduate Student Member
- 6/2009–8/2009 Visiting Student to Singapore-MIT Gabmit Lab, MIT, Boston, USA

## Technical Skills

### Languages (most familiar to least familiar)

C, Python, C++ , Lua, Erlang, Java, D, OCaml, Clojure, Haskell

### Area

Linux Programming, OpenGL programming, Concurrent programming

## Referees

*Wei Tsang Ooi*

supervisor

Assistant Professor

National University of Singapore

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*Romulus Grigoras*

Assistant Professor

IRIT, University of Toulouse

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*Geraldine Morin*

Assistant Professor

IRIT, University of Toulouse

morin@n7.fr

*Y. C. Tay*

Professor

National University of Singapore

dcstayyc@nus.edu.sg

## Miscellaneous

*Citizenship:* China

*Marital Status:* Married

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