

**Hsueh-Cheng (Nick) Wang**

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**Professional Experience***Current Position*

Teaching/ Research Assistant, Department of Computer Science, University of Massachusetts at Boston, USA. 2008 ~ present.

*Past Positions*

Visiting PhD Student, Rayner Eyetracking Lab, University of California, San Diego, USA, 2010 ~ 2011.

Summer Intern, Department of Computer Vision and Image Understanding, Institute for Infocomm Research, Singapore, 2011.

Research Assistant, Graduate Institute of Learning and Instruction, National Central University, Taiwan, 2004 ~ 2008.

Research Assistant, Software Research Center, National Central University, Taiwan, 2003 ~ 2004.

**Education**

PhD: Department of Computer Science, University of Massachusetts at Boston, Jan. 2008 ~ present. Estimated date of completion: June 15, 2012.

Advisor: Dr. Marc Pomplun

Master's Degree: Computer-Aided Engineering Group, Graduate Institute of Civil Engineering, National Taiwan University, Taiwan, 2001~2003.

Advisor: Dr. Shang-Hsien Hsieh

Bachelor's Degree: Department of Civil Engineering, National Taiwan University, Taiwan, 1997~2001.

## Teaching

Instructor, CS 105 Computer Concepts, Fall 2008 to Fall 2011.

Course website: <http://www.cs.umb.edu/~hcwang/cs105/>

## Awards

Research Excellence Award, Graduate Research Symposium, Department of Computer Science, University of Massachusetts at Boston, 2011.

Student Traveling Grant, Asia-Pacific Conference on Vision (APCV), 2010.

Full assistantship, Department of Computer Science, University of Massachusetts at Boston, 2008 ~ present.

## Journal Publications

Wang, H. C., Hwang, A. D. & Pomplun, M. (2010). Object Frequency and Predictability Effects on Eye Fixation Durations in Real-World Scene Viewing. *Journal of Eye Movement Research*, 3(3):3, 1-10.

Hwang, A.D., Wang, H. C. & Pomplun, M. (2011). Semantic guidance of eye movements in real-world scenes. *Vision Research*, 51, 1192-1205.

Wang, H. C. & Pomplun, M. (under revision). The Attraction of Visual Attention to Texts in Real-World Scenes, submitted to *Journal of Vision*.

Wang, H. C., Pomplun, M., Ko, H. W., Chen M. L., & Rayner, K. (2010). Estimating the Effect of Word Predictability on Eye Movements in Chinese Reading using Latent Semantic Analysis and Transitional Probability. *Quarterly Journal of Experimental Psychology*, 63, 7, 1374-1386.

Chen, M. L., Wang, H. C., & Ko, H. W. (2009). The Construction and Validation of Chinese Semantic Space by Using Latent Semantic Analysis. *Chinese Journal of Psychology*, 51, 4, 415-435.

- Wang, H. C. , Tu, W. H., Yu, W. H., Chen, C. S., & Hsieh, S. H. (2001). A Study on E-Teaching/E-Learning Standardization and Courseware Sharing. *Bulletin Of The College Of Engineering, National Taiwan University*, Vol. 85, pp. 59-68.
- Hsieh, S. H., Tseng, P. P., Wang, H. C. (2006). An Expert System for Preliminary Aseismic Capacity Estimation of Traditional School Classroom Buildings Using Case-Based Reasoning. *Journal of Chinese Civil and Hydraulic Engineering*. Vol. 18, No. 1, pp. 95-107.

### **Refereed Conference Proceedings**

- Wang H. C. & Pomplun, M. (2011). The Attraction of Visual Attention to Texts in Real-World Scenes. The Annual Meeting of the Cognitive Science Society (CogSci2011), Boston, USA. (Accepted as oral presentation, 32%)
- Hwang, A. D., Wang, H. C., & Pomplun, M. (2009). Semantic guidance of eye movements during real-world scene inspection. Annual Meeting of the Cognitive Science Society (CogSci 2009), Amsterdam, Netherlands. (Accepted as oral presentation, 32%)

### **Conference Presentations & Manuscripts**

- Wang, H. C., Lu, S. J., Lim, J. H., & Pomplun, M. (manuscript in preparation). Visual Attention is Attracted by Text Features Even in Scenes without Text. Manuscript in preparation for Annual Meeting of the Cognitive Science Society (CogSci 2012).
- Plummer, P., Wang, H. C., Tzeng, Y. T., Pomplun, M., & Rayner K. (manuscript in preparation). A Connectionist Model of Concept Activation during Reading using Latent Semantic Analysis and LandScape Model. Manuscript in preparation for Annual Meeting of the Cognitive Science Society (CogSci

2012).

- Wang, H. C., Hsu L. C., Tien, Y. M., & Pomplun, M. (manuscript in preparation).  
Using Latent Semantic Analysis to Estimate Semantic Transparency and Eye  
Movements in Reading. Manuscript in preparation for Language and Cognitive  
Process.
- Wang, H. C. & Pomplun, M. (2011). How Does Text in Real-World Scenes Attract  
Attention? Scene Understanding Symposium (SUnS), Boston, USA.
- Wang, H. C. & Pomplun, M. (2010). How Text Attracts Attention in Real-World  
Scenes. (ECVP), Lausanne, Switzerland.
- Wang, H. C., Hwang, A. D., Pomplun, M. (2009). Object Frequency and  
Predictability Effects on Eye Fixation Durations in Real-world Scene Viewing.  
15th European Conference on Eye Movements (ECEM), Southampton, UK.
- Wang, H. C. & Pomplun, M. (2011). The Attraction of Visual Attention to Texts in  
Real-World Scenes. Asia-Pacific Conference on Vision (APCV), Hong Kong.
- Wang, H. C., Chen, M. L., Ko, H. W., & Kintsch, W. (2007). Estimating Word's  
Predictability on Lexical Processing using Latent Semantic Analysis –  
Verification from Eye Movement Data, *14th European Conference on Eye  
Movement (ECEM 2007)*, Potsdam, Germany.
- Wang, H. C., Chen, M. L., & Ko, H. W. (2007). Modeling and Simulation of Word  
Identification on Orthographically and Phonologically Similar Words in Context.  
46th annual conference of the Taiwanese Psychology Association, Tainan,  
Taiwan.
- Ko, H. W., Chen, M. L., & Wang, H. C. (2005). The Role of Word during Reading  
Expository Text: Evidence from Eye Movement. 13th European Conference on  
Eye Movements, Bern, Switzerland.