Di-Wei Huang (dwh@cs.umd.edu)

Department of Computer Science, University of Maryland, A.V. Williams Bldg., College Park, MD 20742

EDUCATION	**Ph.D. program in Computer Science**	**September 2008 – Present**

- University of Maryland – College Park

M.S. in Computer Science and Information Engineering   **June 2006**

- National Taiwan University, Taiwan.
- Cumulative GPA: 4.0
- Thesis: *WMM: a Mobility Management Mechanism Using Location Cache for Wireless Mesh Networks.*

B.S. in Computer Science and Information Engineering   **June 2004**

- National Chiao-Tung University, Taiwan
- GPA: 3.91 (overall), 3.97 (major), class ranking: 2/55 (3.6%)

ACADEMIC
EXPERIENCE

Teaching Assistant   **September 2008 – Present**

- University of Maryland
- CMSC350 Introduction to Algorithms
- CMSC417 Computer Networks
- CMSC420 Data Structures

Research Assistant   **February 2008 – August 2008**

- National Taiwan University
- Designed and evaluated a secure communication framework.

Student Research Assistant   **September 2004 – June 2006**

- National Taiwan University
- Designed, prototyped, and evaluated a mobility management mechanism for wireless mesh networks, which then became my thesis topic.
- Participated in building Ubiquitous Multimedia Messaging (UMM) platform, an award-winning design that integrates common messaging systems including SMS, MMS, E-mail, IM, etc.
- Designed and implemented IPv6 tunneling servers, tunneling brokers, and client-side tools.
- Led an undergraduate team in developing QoS monitor for VoIPv6.

Network Administration Staff   **June 2005 – June 2006**

- National Taiwan University
- Maintained network services, including wireless LAN, DNS, NAT, etc.

Teaching Assistant   **February 2005 – January 2006**

- National Taiwan University
- Personal Communication Services
- Information Systems, Fall 2005.

Network Administration Assistant   **September 2002 – March 2004**

- National Chiao-Tung University
- Maintained workstations; Provided technical support at Computer and Network Center.

HONORS AND
AWARDS

Best Master's Thesis Award, Institute of Information & Computing Machinery, Taiwan, 2006.

2nd Prize, The *Mobileheroes* Wireless Communication Software Design Contest, Taiwan, 2004.

Excellence Award, Programming Contest, National Chiao-Tung University, 2003.

The Xun Hwa Scholarship, National Chiao-Tung University, 2003.

The Mr. Shao Xun Yuan Memorial Scholarship, National Chiao-Tung University, 2002.

The 2nd Place, Freshman's Programming Contest, National Chiao-Tung University, 2001.

PUBLICATIONS   *Journals*

- Huang, Di-Wei, Lin, P., and Gan, C.-H., "Design and Performance Study for a Mobility Management Mechanism (WMM) Using Location Cache for Wireless Mesh Networks," *IEEE Transactions on Mobile Computing*, 7(5):546–556, May 2008.
- Guizani, M., Lin, P., Cheng, S.-M., Huang, Di-Wei, and Fu, H.-L., "Minislot Allocation for Wireless Mesh Network," *IEEE Transactions on Vehicular Technology*, 57(6):3732–3745, November 2008.

Conferences

- Huang, Di-Wei and Lin, J., "Scaling Populations of a Genetic Algorithm for Job Shop Scheduling Problems using MapReduce," In *Proceedings of the First International Workshop on Theory and Practice of MapReduce (MAPRED'10)*, November 2010, Indianapolis, Indiana, USA. (to appear)

- Huang, Di-Wei, Lin P., Gan C.-H., and Jeng J.-Y., "A Mobility Management Mechanism Using Location Cache for Wireless Mesh Network," *First International Workshop on Wireless Mesh: Moving Towards Applications (WiMeshNets'06)*, August 2006, Waterloo, Ontario, Canada.

- Cheng, S.-M., Lin, P., Huang, Di-Wei, and Yang, S.-R., "A Study on Distributed/Centralized Scheduling for Wireless Mesh Network," In *Proceedings of the 2006 International Conference on Wireless Communications and Mobile Computing(IWCMC'06)*, pages 599–604, July 2006, Vancouver, British Columbia, Canada.

- Cheng, S.-M., Lin, P., and Huang, Di-Wei, "A Survey on Radio Resource and Mobility Management for Wireless Mesh Network," *The 12th Mobile Computing Workshop*, pages 223–231, March 2006, Taichung, Taiwan.