

Hui-Ju Hung (洪慧儒)

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EDUCATION

Pennsylvania State University (PSU), State College, PA, USA	2014 - now
Ph.D, Computer Science and Engineering (GPA: 3.84/4.00)	
National Taiwan University (NTU), Taipei, Taiwan	2009 - 2011
M.S., Computer Science and Information Engineering (GPA: 4.00/4.00)	
National Tsing Hua University (NTHU), Hsinchu, Taiwan	2005 - 2009
B.S., Computer Science (GPA: 3.81/4.00)	

RESEARCH INTEREST

Social network analytics,
Data Mining,
Big data

PUBLICATIONS

- 2020 **Efficient Algorithms towards Network Intervention**
H.-J. Hung, Wang-Chien Lee, De-Nian Yang, Chih-Ya Shen, Zhen Lei, Sy-Miin Chow
The Web Conference (WWW) 2020, Taipei, Taiwan
- 2016 **When Social Influence Meets Item Inference**
H.-J. Hung, H.-H. Shuai, D.-N. Yang, L.-H. Huang, W.-C. Lee, J. Pei, and M.-S. Chen
KDD 2016, San Francisco, CA, USA
- 2016 **Routing and Scheduling of Social Influence Diffusion in Online Social Networks**
H.-J. Hung, D.-N. Yang, and W.-C. Lee
ICDCS 2016, Nara, Japan
- 2016 **Social Influence-Aware Reverse Nearest Neighbor Search**
H.-J. Hung, D.-N. Yang, and W.-C. Lee
ACM Transactions on Spatial Algorithms and Systems (TSAS), 2016
- 2014 **Scalable and Bandwidth-Efficient Multicast for Software-Defined Networks**
L.-H. Huang, H.-J. Hung, C.-C. Lin, and D.-N. Yang
GLOBECOM 2014, Austin, TX, USA
Best Paper Candidate (Best 50 Papers)
- 2014 **Social Influence-Aware Reverse Nearest Neighbor Search**
H.-J. Hung, D.-N. Yang, and W.-C. Lee
DSAA 2014, Shanghai, China

- 2013 **Maximizing Acceptance Probability for Active Friending in Online Social Networks**
D.-N. Yang, H.-J. Hung, W.-C. Lee, and W. Chen
KDD 2013, Chicago, IL, USA
Featured by MIT Technical Review, ACM TechNews, Phys.org, Popsi.com, Inquisitr.com
- 2013 **Spatial Search for K Diverse-near Neighbors**
G. Ference, W.-C. Lee, H.-J. Hung, and D.-N. Yang
CIKM 2013, San Francisco, CA, USA
- 2013 **Relay Selection for Heterogeneous Cellular Networks with Renewable Green Energy Sources**
S.-Y. Lee, H.-J. Hung, C.-Y. Yang, T.-Y. Ho, and D.-N. Yang
Under revision for IEEE Transactions on Mobile Computing (TMC)
- 2012 **On Bundle Configuration for Viral Marketing in Social Networks**
D.-N. Yang, W.-C. Lee, N.-H. Chia, M. Ye, and H.-J. Hung
CIKM 2012, Maui, HI, USA

AWARDS & HONORS

- 2017 **TAAI Best Paper Award**
- 2016 **Student Travel Award (KDD)**
- 2016 **Student Travel Award (ICDCS)**
- 2014 **GLOBECOM Best Paper Candidate (Best 50 Papers)**
- 2010 **Excellent Teaching Assistant Award, NTU**
Course: System Programming (Instructor: Prof. Pu-Jen Cheng)
- 2009 **Academic Achievement Award, NTHU**
- 2008 **Ninth Place in ACM International Collegiate Programming Contest (ACM-ICPC) Asia Region Kuala Lumpur Site**
- 2008 **Seventh Place in ACM-ICPC Asia Region Taipei Site**
- 2008 **Honorable Mention in National Collegiate Programming Contest**
- 2008 **Fifth Place in Tsinghua-HKUST Programming Contest**
- 2008 **Scholarship for Excellent EECS Students (Junior), NTHU**
- 2008 **Travel Award from ITCSC Winter School, Chinese University of Hong Kong**
- 2007 **Fifth Place in ACM-ICPC Asia Region Singapore Site**
- 2007 **Runner Up in Cluster Challenges in ACM/IEEE Supercomputing (SC'07)**
- 2007 **Second Place in National Collegiate Programming Contest**
- 2007 **Third Place in Tsinghua-HKUST Programming Contest**
- 2006 **Honorable Mention in National Collegiate Programming Contest**
- 2006 **Honorable Mention in ACM-ICPC Asia Region Kaohsiung Site**
- 2005 **Scholarship for Excellent EECS Students (Freshman), NTHU**
- 2004 **Forth Place in National Problem Solving Contest**

WORK EXPERIENCES

Sep 2017 – Now

Research Assistant

Advisor: Prof. Wang-Chien Lee and Prof. Sy-Miin Chow
Dept. of Human Development and Family Studies (HDFS), PSU,
State College, USA

Jan 2016 - May 2017

Teaching Assistant

Course: Database Management Systems, Data Structures and Algorithms
Dept. of CSE, PSU, State College, USA

Aug 2014 – Dec 2015

Research Assistant

Advisor: Prof. Wang-Chien Lee and Prof. Zhen Lei
Dept. of CSE, PSU, State College, USA

Dec 2011 – Aug 2014

Research Assistant

Advisor: Dr. De-Nian Yang
Institute of Information Science (IIS) &
Research Center for Information Technology Innovation (CITI),
Academia Sinica, Taipei, Taiwan

Sep 2010 - Jan 2011

Teaching Assistant

Course: Web Retrieval and Mining
Dept. of CSIE, NTU, Taipei, Taiwan

Jul 2010 - Aug 2010

Summer Intern

Trend Micro, Taipei, Taiwan

Feb 2010 - Jun 2010

Teaching Assistant

Course: System Programming
Dept. of CSIE, NTU, Taipei, Taiwan

Jul 2009 - Sep 2009

Research Assistant

Advisor: Prof. Eric Lo and Prof. Edward Hung
Working on Privacy Preservation of Publicly Released Association Rules
Dept. of Computing, Hong Kong Polytechnic University, Hong Kong

Sep 2008 - Jun 2009

Teaching Assistant

Programming Contests Training Class (Advisor: Prof. Ming-Jer Tsai)
Dept. of CS, NTHU, Hsinchu, Taiwan

RESEARCH PROJECTS

Patents and Paper Matching Problem

Hui-Ju Hung, Wang-Chien Lee, and Zhen Lei

We aim to identify patents originated from published papers by considering various approaches, including text-similarity based method, sentence-copying based method, learning-based method, and heterogeneous information network based methods. Due to the scalability issues faced in data

processing in computing big data analytics, we are investigating distributed algorithms and platforms such as Spark.

Query Prediction by Currently-Browsed Web Pages and its Applications

Hui-Ju Hung (master thesis in Dept. of CSIE, NTU, July 2011, advisor: Prof. Pu-Jen Cheng)

We examined the relation between some issued queries and the web pages browsed before issuing those queries, called the current-browsed web pages. As the relation does exist in some queries, the content of the current-browsed web pages may help to understand the query intent. We developed a predictor to examine whether the current-browsed web pages are related to the issued query.

COURSES

Web Retrieval and Mining, Social Network Analysis and Graph Mining, Data Mining, Data Systems Design, Natural Language Processing, Parallel Algorithm Design, Information Retrieval, Numerical Optimization Techniques

COMPUTER SKILLS

C/C++, Python, Java, Matlab, Shell script, R