

# Hui-Ju Hung (洪慧儒)

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## EDUCATION

<b>Pennsylvania State University (PSU), State College, PA, USA</b>	<b>2014 - 2024</b>
Ph.D, Computer Science and Engineering (GPA: 3.84/4.00)	
<b>National Taiwan University (NTU), Taipei, Taiwan</b>	<b>2009 - 2011</b>
M.S., Computer Science and Information Engineering (GPA: 4.00/4.00)	
<b>National Tsing Hua University (NTHU), Hsinchu, Taiwan</b>	<b>2005 - 2009</b>
B.S., Computer Science (GPA: 3.81/4.00)	

## RESEARCH INTEREST

Social network analytics, graph optimization problems, data mining, big data, deep learning

## PUBLICATIONS

- 2024     **Efficient Detection of k-Plex Structures in Large Graphs Through Constraint Learning**  
H.-J. Hung, , C.-H. Lu, Y.-Y. Huang, M.-Y. Chang, Y.-C. Ho, C.-Y. Shen  
IEEE Transactions on Computational Social Systems (TCSS)
- 2024     **Leveraging Transfer Learning for Enhancing Graph Optimization Problem Solving**  
H.-J. Hung, W.-C. Lee, C.-Y. Shen, F. He, Z. Lei  
PAKDD 2024, Taipei, Taiwan
- 2024     **Learning to Solve Combinatorial Optimization Problems on Graphs with State-Aware Multi-Relation Aggregation**  
H.-J. Hung, W.-C. Lee, T.-Y. Fu, C.-Y. Shen, Z. Lei  
To appear in ACM/SIGAPP Symposium On Applied Computing (SAC), Avila, Spain
- 2020     **Efficient Algorithms towards Network Intervention**  
H.-J. Hung, W.-C. Lee, D.-N. Yang, C.-Y. Shen, Z. Lei, S.-M. Chow  
The Web Conference (WWW) 2020, Taipei, Taiwan
- 2018     **Relay Selection for Heterogeneous Cellular Networks with Renewable Green Energy Sources**  
H.-J. Hung, T.-Y. Ho, S.-Y. Lee, C.-Y. Yang, and D.-N. Yang  
IEEE Transactions on Mobile Computing (TMC)

- 2017     **Multi-source Learning for Sales Prediction**  
K.-H Tsai, Y.-S Wang, H.-Y Kuo, J.-Y Tsai, C.-C Chang, H.-J Hung, H.-H Shuai  
TAAI, Taipei, Taiwan  
*Best Paper Award*
- 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, Popsci.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
- 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

- 2024     **PAKDD Student Travel Award**
- 2024     **SIGAPP Student Travel Award**
- 2020     **Student Travel Award (WWW)**
- 2017     **Student Scholarship for ACM's Celebration of 50 Years of the Turing Award**  
*Sponsored by SIGKDD*
- 2017     **TAAI Best Paper Award**

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

## **ACADEMIC SERVICES**

### **PC Member:**

Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD)  
IEEE Global Communications Conference (Globecom)

### **Reviewer:**

ACM Transactions on Intelligent Systems and Technology (TIST)  
IEEE/ACM Transactions on Networking (TON)  
IEEE Transactions on Services Computing (TSC)  
IEEE Transactions on Parallel and Distributed Systems (TPDS)  
Data & Knowledge Engineering (DKE)

## **COMPUTER SKILLS**

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

## **POSSIBLE COURSES**

Algorithms, data structure, database, data mining, information retrieval, web mining, programming