SHAO-HENG KO

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RESEARCH INTERESTS

Approximation, Randomized, Distributed, Streaming, and Online Algorithms; Algorithmic Game Theory

EDUCATION

Duke University 2020 - now

- Ph.D., *Computer Science*

National Taiwan University

- M.S., *Graduate Institute of Electrical Engineering* 2015 - 2017
  Advisor: Ho-Lin Chen, Thesis: Encouraging Peer Grading in MOOCs
- B.S., *Electrical Engineering* 2011 - 2015

EXPERIENCE

Institute of Information Science, Academia Sinica

- Research Assistant, *Data Mining and Machine Learning Laboratory* 2017 - 2020
  Advisor: Dr. De-Nian Yang, Research Area: Approximation Algorithms, Social Network
- Undergraduate RA, *Data Mining and Machine Learning Laboratory* 2013 - 2015

PUBLICATIONS

2. *Optimizing Item and Subgroup Configurations for Social-Aware VR Shopping.*
   S.-H. Ko, H.-C. Lai, H.-H. Shuai, D.-N. Yang, W.-C. Lee, and P. S. Yu
   VLDB 2020 (full research paper)

1. *On VR Spatial Query for Dual Entangled Worlds.*
   S.-H. Ko, Y.-C. Lin, H.-C. Lai, W.-C. Lee, and D.-N. Yang
   ACM CIKM 2019 (full research paper)

AWARDS AND HONORS

Best Master Thesis *GIEE, NTU*, 2017
Undergraduate Research Grant (PI: I-Hsiang Wang, Grant 103-2815-C-002-063-E) *MOST, Taiwan*, 2014
Bronze Medal, Asian Pacific Mathematics Olympiad (APMO) 2009

TEACHING/COORDINATING EXPERIENCES

Coordinator, Advanced Algorithms Study Group, *IIS, Academia Sinica* 2018 - 2020
TA, EE5182 Advanced Algorithms, *NTU* Spring 2017
TA, EE5048 The Design and Analysis of Algorithms, *NTU* Fall 2015 & Fall 2016
Lead TA, EE2008 Discrete Mathematics, *NTU* Spring 2016

ACADEMIC SERVICES

Reviewer, IEEE GLOBECOM 2018

ONLINE LEARNING/TEACHING INNOVATION

Massive Open Online Courses Explorer, Lab. Teaching Innovation, NTU 2015 - 2017

- Studied publications on online learning; helped manufacturing NTU MOOCs on Coursera
- Designed and produced mini-MOOCs for exhibition in ZaShare 2017
- Wrote column pieces to promote online learning
- Co-organized and paneled the "Why MOOCs" workshop

Co-editor of *Benson's amazement in probability*, a bestseller collection of self-proposed peer-assessment problems in flipped-classroom undergraduate probability classes in Taiwan. ISBN: 9789861371832