Sinong Wang（王思浓）

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Objective

◆   Ph.D. degree in "Electronic Engineering; Computer Science;"

Education

Sept.2010-Jun.2014   Bachelor of Electronic Engineering   Xidian University (XDU)
◆ Be recommended for admission to Pilot Class (66 elected from 960) due to first prize of Chinese Mathematical Olympiad in high school;
◆ GPA: 91.5/100 (overall), 93/100 (major class); Ranking 1/560 in our Major , Ranking 1/66 in Pilot Class.

June.2014-Present   PhD candidate of Electronic Engineering   Shanghai Jiao Tong University(SJTU)

Paper List

◆ **Sinong Wang**, Xiaohua Tian and Hui Liu, "Exploiting the Unexploited of Coded Caching for Wireless Content Distribution," *ICNC 2015*. (accepted with high grade, potential on "Best Paper Award")
◆ **Sinong Wang**, Muhan Zhang, Xiaowen Li, Xiaohua Tian, Xinbing Wang. "Dynamic Coded Caching for Massive Content Distribution over Wireless Networks," *INFOCOMM 2015*. (under review)
◆ **Sinong Wang**, Xiaohua Tian and Hui Liu, "Delay Reduce Traffic in Wireless Caching Network", IEEE Transactions on Vehicular Technology (under review)
◆ Zhe Liu, **Sinong Wang**, Weijie Wu, Xiaohua Tian, Changle Li and Xinbin Wang, "A Predictive Methodology for Truthful Double Spectrum Auctions in Cognitive Radio Networks," GLOBECOM 2014. (accepted)
◆ Zhe Liu, Weijie Wu, **Sinong Wang**, Xiaohua Tian, Changle Li and Xinbin Wang, "On Resource Allocation and Pricing in Hybrid Cloud: A Hierarchical Approach", *INFOCOMM 2015*. (under review)
◆ **Sinong Wang**, Huaxi Gu, Gang Wu, "A New Approach to Multi-objective Virtual Machine Placement in Virtualized Data Center", IEEE NAS 2013. (accepted rate 29%)

   (All papers are available on my personal website.)

Technical Report

◆ **Sinong Wang**, Xiaohua Tian and Hui Liu, "Exploiting the unexploited of coded caching for wireless content distribution: Detailed theoretical proofs", for *ICNC 2015*.
◆ **Sinong Wang**, Muhan Zhang, Xiaowen Li, Xiaohua Tian, Xinbing Wang. "Dynamic Coded Caching for Massive Content Distribution over Wireless Networks," for *INFOCOMM 2015*.

Patents

◆ Xi Wang, Wenxuan Zhao and **Sinong Wang**, "Natural growth reconstruction method", Chinese Patent, April 2013, 201310128903.3
◆ Wenxuan Zhao, Xi Wang and **Sinong Wang**, "Intelligent taxi scheduling mehtod", Chinese Patent, Jun 2013, pending

Research Experience

National Collaborative Innovation Center of Future Media and Network, Mar.2014-Present
◆ Researched on the coded cache for massive content delivery; designed an order optimal coded cache scheme for nonuniform user demands; completed one paper to IEEE ICNC 2015 (accepted with high grade, targeted on the "Best Paper Award").

- Researched on the coded cache for massive content delivery; generalized the static coded caching scheme to the dynamic coded caching scheme; designed a high-order Markov model to predict the content popularity distribution; completed one paper submitted to IEEE INFOCOMM 2015.
- Researched on the delay-traffic trade-off in single bottleneck network; first work to address this problem; constructed the lower bound of such problem; presented three classes of schemes under two scenarios and analyzed their trade-off; completed one paper submitted to IEEE Transactions on.
- Research on the throughput of coded cache

"Green cloud network architecture", National University Student Innovation Program, PI, 2012- 2013

- Researched on the how to schedule resource in the data center, especially on aspects of the virtual machine placement; proposed a new approach to VM placement jointly considering the server resource utilization and load balancing; completed one paper to IEEE International Conference on Networking, Architecture, and Storage (accepted, EI indexed)
- Researched on the design of dynamic scalable typology and corresponding routing protocol in data center to support the network load balancing and multicast.

State Key Laboratory of Integrated Service Network, Apr.2012-Oct.2013

- Project engineer of Android App development for the "Intelligent taxi system", same as Hailo; responsible for the development of Android client; including the design of date transmission, taxi scheduling method (based on SPFA) and the UI; completed one Chinese Patent,
- Project engineer for constructing the routing protocol of data center; gave two presentations.

EMSD and Automation College, Jan.2013-Jun.2013

- Principal investigator in project, *Fast 3D reconstruction*; constructed a demo to reconstruct 3D graphics from two different 2D graphics; based on the principle of binocular imaging; completed one Chinese Patent, "Natural growth reconstruction method", 201310128903.3

Other Experience, Mar. 2011-Present

- Participated in Interdisciplinary Contest in Modeling (ICM) 2013 as team leader, researched on predicting future state of the earth ecosystem and was awarded Meritorious Winner.

Activities

Professional Activities

- *Secondary reviewer* for IEEE Infocom, IEEE Globecom, IEEE MASS, IEEE Transactions on Vehicular Technology, IEEE Transactions on Mobile Computing, IEEE Transactions on Communication and Springer Wireless Networks (WINET)
- *Reviewer* for IEEE ICNC, IEEE WCSP.

Extracurricular Activities

- Vice-director, The School League Committee, 2011-2012

Honors &Awards

- Awarded Meritorious Winner, Interdisciplinary Contest in Modeling (ICM) (2013)
- National Scholarship (2011)
- Awarded the second-prize, "Challenge Cup" National Undergraduate Curricular Academic Science and technology works (2013)
- Awarded the second-prize, China Undergraduates Mathematical Contest Modeling (CUMCM) (2012)
- Awarded the Outstanding Graduates of Xidian University (2014)
- Awarded the Outstanding Student of Xidian University (2011,2012,2013)
- The Special Scholarship of Xidian University (2010, 2011)
- The First-class Scholarship of Xidian University (2012, 2013)
- ZTE Scholarship, awarded $1000 (2013)
- GOODIX Scholarship, awarded $2500 (2014)
- Awarded the first-prize, Speech contest of Xidian University (2012)

◆ Awarded the first prize, Chinese Mathematical Olympiad in Senior (CMO) (2009)

Skills

English Level: GRE (V: 0, 0%; Q: 0, 0%; W: 0, 0%), TOEFL (81)

IT Skills: Skilled in use of MS Office software, originLab and LaTeX; programming languages: C++ (proficient), Java, MATLAB (proficient), LABVIEW, C; a lot of experience in Android; National Certificate in Computing Level 3

ART Skills: Professional in Clarinet (Grade 6); play the harmonica and the piano;