Yunhe Feng

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EDUCATION

Ph.D. in Computer Science, University of Tennessee, Knoxville, USA, Expected Graduate in May 2020
M.E. in Computer Technology, Beijing University of Technology, China, 2014
B.E. in Computer Science & Technology, Beijing University of Technology, China, 2011

PROFESSIONAL EXPERIENCE

University of Tennessee, Knoxville (UTK) *Graduate Research Assistant*, 2014 – present Knoxville, TN
Oak Ridge National Laboratory *Research Assistant*, Oct. 2018 – Aug. 2019 Oak Ridge, TN
Oak Ridge National Laboratory *Deep Learning Research Intern*, Summer 2018 Oak Ridge, TN

PUBLICATIONS

Peer-Reviewed Conference and Journal Papers

1. **Yunhe Feng**, Qing Cao, Hairong Qi, and Scott Ruoti. Sencaptcha: A mobile-first captcha using orientation sensors. *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (formerly known as **UbiComp**)*, forthcoming, 2020 [10-year average acceptance rate: 18.5%].

2. Peng Sun, Zhibo Wang, **Yunhe Feng**, Liantao Wu, Yanjun Li, Hairong Qi, and Zhi Wang. Towards personalized privacy-preserving incentive for truth discovery in crowdsourced binary-choice question answering. In *IEEE Conference on Computer Communications (INFOCOM)*. IEEE, 2020 [Acceptance rate of 19.8%].

3. **Yunhe Feng**, Zheng Lu, Wenjun Zhou, Zhibo Wang, and Qing Cao. New emoji requests from twitter users: When, where, why, and what we can do about them. *ACM Transactions on Social Computing (TSC)*, 3(2), April 2020.

4. **Yunhe Feng**, Zongyao Chen, Dali Wang, Jian Chen, and Zhili Feng. Deepwelding: a deep learning enhanced approach to gtaw using multi-source sensing images. *IEEE Transactions on Industrial Informatics*, 2019 [Impact factor: 7.377].

5. Zhibo Wang, Yijie Li, Bonan Jin, Qian Wang, **Yunhe Feng**, Yanjun Li, and Huajie Shao. Airmouse: Turning a pair of glasses into a mouse in the air. *IEEE Internet of Things Journal*, 2019 [Impact factor: 9.515].

6. **Yunhe Feng**, Wenjun Zhou, Zheng Lu, Zhibo Wang, and Qing Cao. The world wants mangoes and kangaroos: A study of new emoji requests based on thirty million tweets. In *The World Wide Web Conference (WWW)*, pages 2722–2728. ACM, 2019 [Acceptance rate: 20.0%].

7. **Yunhe Feng**, Zheng Lu, Zhonghua Zheng, Peng Sun, Wenjun Zhou, Ran Huang, and Qing Cao. Chasing total solar eclipses on twitter: Big social data analytics in once-in-a-lifetime events. In *2019 IEEE Global Communications Conference (GLOBECOM)*. IEEE, 2019 [Acceptance rate: 38%].

8. Lu Zheng, **Yunhe Feng**, and Qing Cao. Two-level index for truss community query in large-scale graph. In *2019 IEEE Global Communications Conference (GLOBECOM)*. IEEE, 2019 [Acceptance rate: 38%].

9. Peng Sun, Liantao Wu, Zhibo Wang, **Yunhe Feng**, and Zhi Wang. Scra: Structured compressive random access for efficient information collection in iot. *IEEE Internet of Things Journal*, forthcoming, 2019 [Impact factor: 9.515].

10. Zheng Lu, **Yunhe Feng***, Wenjun Zhou, Xiaolin Li, and Qing Cao. Inferring correlation between user mobility and app usage in massive coarse-grained data traces. *Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies (the new publication model of **UbiComp**)*, 1(4):153, 2018 [*** Correspondence author**, 10-year average acceptance rate: 18.5%].

11. **Yunhe Feng**, Zheng Lu, and Qing Cao. Secure sharing of private locations through homomorphic bloom filters. In *2018 IEEE 4th International Conference on Big Data Security on Cloud (BigDataSecurity)*, pages 107–113. IEEE, 2018 [**Best Paper Award**, acceptance rate: 18.6%].

12. **Yunhe Feng**, Zheng Lu, Wenjun Zhou, Qing Cao, and Xiaolin Li. A multi-granularity perspective for spatial profiling of mobile apps. *Information Sciences*, 430:127–141, 2018 [Impact factor: 4.832].

13. Zheng Lu, **Yunhe Feng**, and Qing Cao. Decentralized search for shortest path approximation in large-scale complex networks. In *2017 IEEE International Conference on Cloud Computing Technology and Science (CloudCom)*, pages 130–137. IEEE, 2017 [**Honorable Mention for Best Paper**, acceptance rate: 29.4%].

14. Qing Cao, **Yunhe Feng**, Zheng Lu, Hairong Qi, Leon M Tolbert, Lipeng Wan, Zhibo Wang, and Wenjun Zhou. Approximate cardinality estimation (ace) in large-scale internet of things deployments. *Ad Hoc Networks*, 66:52–63, 2017 [Impact factor: 3.047].

15. Lipeng Wan, Zhibo Wang, Zheng Lu, **Yunhe Feng**, Hairong Qi, Wenjun Zhou, and Qing Cao. Approximate and sublinear spatial queries for large-scale vehicle networks. *IEEE Transactions on Vehicular Technology (TVT)*, 67(2):1561–1569, 2017 [Impact factor: 2.243].

Undergoing Projects

1. **Yunhe Feng** and Wenjun Zhou. Seed stocking via multi-task learning and two-step allocation.
2. **Yunhe Feng**, Zheng Lu, and Qing Cao. Senkeyboard: An intelligent secure sensor based keyboard for mobile devices.
3. **Yunhe Feng**, Olufemi Omitaomu, and Qing Cao. Predicting reliability performance of electronic health records using markov chain and perturbation algorithm.

TEACHING EXPERIENCE

Guest Lecturer

SOAD M485 **Data-Driven Decisions**, Indiana University Bloomington, Spring 2020

BAZN 557 **Text Mining**, Haslam College of Business, UTK, Fall 2018, Fall 2019

Teaching Assistant

ECE 453/553 **Computer Communication Networks**, Spring 2018

COSC 361 **Operating Systems**, Spring 2015, Fall 2016, Spring 2017

ECE 451 **Computer Systems Architecture**, Fall 2014

PROFESSIONAL ACTIVITIES

Technical Program Committee

International Symposium on Emerging Information Security and Applications (EISA), 2020
IEEE Global Communications Conference (GLOBECOM), 2020, 2019

Journal Review

Reviewer for IEEE Transactions on Industrial Informatics (TII), 2020
Reviewer for IEEE Access Journal, 2019
Reviewer for International Journal of Forecasting, 2019
External referee for IEEE Transactions on Knowledge and Data Engineering (TKDE), 2018

Conference Review

Reviewer for American Medical Informatics Association (AMIA) 2020 Annual Symposium, 2020
External referee for ACM SIGKDD Int'l Conf. on Knowledge Discovery & Data Mining (SIGKDD), 2019
Reviewer for 14th IEEE International Conference on Mobile Ad hoc and Sensor Systems (MASS), 2017
External referee for the IEEE International Conference on Data Mining (ICDM), 2016
Reviewer for International Conference on Mobile Ad-hoc and Sensor Networks (MSN), 2016, 2019
Reviewer for the 2016 International Conference on Information Systems (ICIS), 2016

TECHNICAL SKILLS

User Study: Amazon Mechanical Turk (MTurk), Qualtrics, IRB application

Deep Learning: Python, TensorFlow, Keras, Torch

Big Data: Python, Spark, Matlab

Web/Android App Development: HTML, JavaScript, MySQL, PHP, Java, XML

Software Development: C++, C#, Qt, C, Fortran

HONORS & AWARDS

Student Registration Grants, IEEE Symposium on Security and Privacy, 2020

Kaggle's Open Data Research Grant Award, 2020

Min H. Kao Fellowship (The Highest Departmental Award), UTK, 2019-2020

The Graduate Student Senate (GSS) Travel Awards, UTK, 2019

Gonzalez Family Awards (Outstanding Graduate Research Assistant), UTK, 2018, 2019

Best Paper Award, BigDataSecurity, 2018

Honorable Mention for Best Paper,CloudCom, 2017

Finalist, The INFORMS Syngenta 2017 Crop Challenge in Analytics (Top 5 among 600 Teams), 2017

EECS Department Excellence Fellowship, UTK, 2014-2015

Outstanding Graduate Student Award, Beijing University of Technology, 2014

Third-Prize in 14th China National Robotics Championship FIRA Simulation Competition, 2012

Third-Prize in RoboCup (Robot World Cup) China Open 2012 Simulation 2D Group, 2012

Outstanding Undergraduate Student Award, Beijing University of Technology, 2011

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