

Yunhe Feng

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EDUCATION

Ph.D. in Computer Science, University of Tennessee, Knoxville, USA, 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 Washington <i>Postdoctoral Scholar</i> , Aug. 2020 – Current	Seattle, WA
University of Tennessee, Knoxville (UTK) <i>Graduate Research Assistant</i> , 2014 – 2020	Knoxville, TN
Oak Ridge National Laboratory <i>Research Assistant</i> , Oct. 2018 – Aug. 2019	Oak Ridge, TN
Oak Ridge National Laboratory <i>Deep Learning Research Intern</i> , Summer 2018	Oak Ridge, TN

PUBLICATIONS

Peer-Reviewed Conference and Journal Papers

1. **Yunhe Feng** and Wenjun Zhou. Is working from home the new norm? an observational study based on a large geo-tagged covid-19 twitter dataset. *arXiv preprint arXiv:2006.08581*, 2020.
2. Peng Sun, Zhibo Wang, Liantao Wu, **Yunhe Feng**, Xiaoyi Pang, Hairong Qi, and Zhi Wang. Towards personalized privacy-preserving incentive for truth discovery in mobile crowdsensing systems. *IEEE Transactions on Mobile Computing*, forthcoming, 2020.
3. **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*, 4(2), 2020 [10-year average acceptance rate: 18.5%, **Best Presentation, Audience Award Nomination and Judges Award Nomination @UbiComp2020**].
4. 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%].
5. **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.
6. **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].

7. 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].
8. **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%].
9. **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%].
10. 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%].
11. 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].
12. 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%].
13. **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%].
14. **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].
15. 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%].
16. 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].
17. 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 Conferences on High Performance Computing and Communications (HPCC), 2020
International Symposium on Emerging Information Security and Applications (EISA), 2020
IEEE Global Communications Conference (GLOBECOM), 2020, 2019

Journal Review

Reviewer for Elsevier Computers & Security, 2020
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

MEDIA COVERAGE

Why Isn't There a Sarcasm Emoji? [[Financial Times](#)] [[Yahoo! Finance](#)] [[Business Insider](#)]
The Algorithm Shows Which New Emoji Twitter Users Want Most [[TNW](#)] [[News Break](#)]
'Sarcasm' among most requested emojis according to UT study [[WBIR-TV](#)] [[Video](#)]

HONORS & AWARDS

Google Cloud COVID-19 Research Credits (\$9,000), 2020
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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