398 Ortega Ave
Mountain View, CA, 94040
+1-917-634-0209
yanhongwu@outlook.com
yhwu.me

Yanhong Wu

Education

2014–2017 **Ph.D. in Computer Science**, *Department of Computer Science and Engineering*, **Hong Kong University of Science and Technology**, Hong Kong.
- Supervisor: Prof. Huamin Qu
- Research Interests: **Graph Modeling**, **Deep Learning**, and **Visual Analytics**

2009–2013 **Bachelor of Engineering**, **Fudan University**, Shanghai, China.
- Advisor: Prof. Haibo Chen
- Selected Courses: Machine Learning, Algorithm & Data Structures, Compilers, Operating Systems, Computer Architecture, Computer Networks, Database Design, etc.

Working Experience

2020.3–Present Research Scientist, ***Meta***, Menlo Park, CA, U.S.
- Developing modern recommendation systems for short-form videos (Facebook Reels).
- Conducted research on large-scale recommendation systems (Facebook AI).
- Programming and tools: PyTorch, Python, Caffe2, C++

2018.3–2020.3 Staff Research Scientist, ***Visa Research*** | *Risk Modeling Team*, Palo Alto, CA, U.S.
- Conducted research on graph representation learning and interpretable machine learning.
- Developed RNN-based fraud detection models on massive temporal transaction data.
- Programming and tools: Python, TensorFlow, Hadoop, Spark

2017.8–2018.3 Post-doctoral Researcher, ***IBM T.J. Watson Research Center***, NY, U.S.
- Conducted research on graph mining and modeling.
- Developed interpretable anomaly detection solutions in financial domains.
- Programming and tools: Python, Numpy, Pandas, SQL, Graph Databases

2016.5–2016.9 Visiting Scholar, ***INRIA*** | *Aviz Lab*, Paris, France.
- Supervisor: Prof. Jean-Daniel Fekete
- Conducted research on progressive visualization of large-scale graphs.
- Programming and tools: Python, Javascript, Vue, WebGL, D3

2015.6–2015.9 Research Intern, ***Microsoft Research Asia*** | *Internet Graphics Group*, Beijing, China.
- Mentor: Dr. Weiwei Cui
- Conducted research on understanding graph sampling algorithms in visual analytics.
- Programming and tools: Python, Javascript, AngularJS, WebGL, D3
- Supervisor: Prof. Huamin Qu

2013.2–2013.6 System Engineer Intern, ***eBay Engineering and Research Center***, Shanghai, China.
- Developed eBay's OpenStack-based cloud service system OpenStratus.
- Programming and tools: Java, Shell Scripts, OpenStack, KVM

Publications

Yanhong Wu, Naveen Pitipornvivat, Jian Zhao, Sixiao Yang, Guowei Huang, and Huamin Qu. egoslider: Visual analysis of egocentric network evolution. In *IEEE Transactions on Visualization and Computer Graphics (Proceedings of IEEE VIS)*, Oct. 2015.

Yanhong Wu, Wenbin Wu, Sixiao Yang, Youliang Yan, and Huamin Qu. Interactive visual summary of major communities in a large network. In *IEEE Pacific Visualization Symposium (PacificVis)*, Apr. 2015.

Qiaomu Shen, Tongshuang Wu, Haiyan Yang, **Yanhong Wu**, Huamin Qu, and Weiwei Cui. Nameclarifier: A visual analytics system for author name disambiguation. In *IEEE Transactions on Visualization and Computer Graphics (Proceedings of IEEE VIS)*, Oct. 2016.

Yanhong Wu, Nan Cao, Daniel Archambault, Qiaomu Shen, Huamin Qu, and Weiwei Cui. Evaluation of graph sampling: A visualization perspective. In *IEEE Transactions on Visualization and Computer Graphics (Proceedings of IEEE VIS)*, Oct. 2016.

Jian Zhao, Michael Glueck, Fanny Chevalier, **Yanhong Wu**, and Azam Khan. Egocentric analysis of dynamic networks with egolines. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* ***(Best Paper Honorable Mention)***, Apr. 2016.

Xun Zhao, **Yanhong Wu**, Weiwei Cui, Xinnan Du, Yuan Chen, Yong Wang, Dik Lun Lee, and Huamin Qu. Skylens: Visual analysis of skyline on multi-dimensional data. In *IEEE Transactions on Visualization and Computer Graphics (Proceedings of IEEE VIS)*, Oct. 2017.

Po-Ming Law, Rahul C. Basole, and **Yanhong Wu**. Duet: Helping data analysis novices conduct pairwise comparisons by minimal specification. In *IEEE Transactions on Visualization and Computer Graphics (Proceedings of IEEE VIS)*, Oct. 2018.

Po-Ming Law, **Yanhong Wu**, and Rahul C. Basole. Segue: Overviewing evolution patterns of egocentric networks by interactive construction of spatial layouts. In *IEEE Conference on Visual Analytics Science and Technology (IEEE VIS)*, Oct. 2018.

Yong Wang, Hammad Haleem, Conglei Shi, **Yanhong Wu**, Xun Zhao, Siwei Fu, and Huamin Qu. Towards easy comparison of local businesses using online reviews. In *Computer Graphics Forum (Proceedings of EuroVis)*, Jun. 2018.

Xun Zhao, **Yanhong Wu**, Dik Lun Lee, and Weiwei Cui. iforest: Interpreting random forests via visual analytics. In *IEEE Transactions on Visualization and Computer Graphics (Proceedings of IEEE VIS)*, Oct. 2018.

Xun Zhao, Weiwei Cui, **Yanhong Wu**, Haidong Zhang, Huamin Qu, and Dongmei Zhang. Oui! outlier interpretation on multi-dimensional data via visual analytics. In *Computer Graphics Forum (Proceedings of EuroVis)*, Jun. 2019.

Aravind Sankar, **Yanhong Wu**, Yuhang Wu, Wei Zhang, Hao Yang, and Hari Sundaram. Groupim: A mutual information maximizing framework for neural group recommendation. In *ACM SIGIR Conference on Research and Development in Information Retrieval*, Jul. 2020.

Qiaomu Shen, **Yanhong Wu**, Yuzhe Jiang, Wei Zeng, Alexis KH Lau, Anna Vianova, and Huamin Qu. Visual interpretation of recurrent neural network on multi-dimensional time-series forecast. In *IEEE Pacific Visualization Symposium (PacificVis)*, Apr. 2020.

Aravind Sankar, **Yanhong Wu**, Liang Gou, Wei Zhang, and Hao Yang. Dysat: Deep neural representation learning on dynamic graphs via self-attention networks. In *ACM International WSDM Conference*, Feb. 2020 (Oral).

Skills

Programming	Proficient in Python, Java, C/C++, and JavaScript
	Familiar with R, Scala, Ruby, C#, and OCaml
Machine Learning	PyTorch, TensorFlow, Numpy, Pandas, etc.
Data Science	SQL, MongoDB, Hadoop, Pig, Spark, etc.
Visual Analytics	D3.js, Three.js, Vega, Matplotlib, Bokeh, etc.

Professional Activities

PC/Senior PC	The Web Conference (WWW), 2021–2023
	ACM International Conference on Web Search and Data Mining (WSDM), 2023
	International Joint Conferences on Artificial Intelligence (IJCAI), 2021–2022
	Association for the Advancement of Artificial Intelligence (AAAI), 2022
	ACM International Conference on Intelligent User Interfaces (IUI), 2020–2022

	IEEE VIS (VAST, InfoVis, and SciVis) - Short Papers, 2019–2021
	IEEE Pacific Visualization Symposium (PacificVis) - Visualization Notes, 2018–2021
	Symposium on Visualization in Data Science (VDS at IEEE VIS), 2018–2021
	International Workshop on Data Mining in Bioinformatics (BIOKDD), 2020
Conf. Reviewer	The International Conference on Learning Representations (ICLR), 2021-2023
	The Conference on Neural Information Processing Systems (NeurIPS), 2021-2022
	The International Conference on Machine Learning (ICML), 2020, 2022
	IEEE VIS (VAST, InfoVis, and SciVis) Conference, 2016–2020
	IEEE Eurographics/VGTC Symposium on Visualization (EuroVis), 2016–2020
	IEEE Pacific Visualization Symposium (PacificVis), 2016–2020
	IEEE International Conference on Big Data, 2017
	ACM Conference on Human Factors in Computing Systems (CHI), 2018–2019
	ACM International Conference on Intelligent User Interfaces (IUI), 2019
	The International Symposium on Graph Drawing & Network Visualization (GD), 2016–2017
	The China Visualization and Visual Analytics Conference (ChinaVis), 2016, 2018
Journal Reviewer	IEEE Transactions on Visualization and Computer Graphics (TVCG), 2016–2021
	IEEE Transactions on Knowledge and Data Engineering(TKDE), 2018, 2021
	IEEE Transactions on Multimedia (TMM), 2016
	IEEE Computer Graphics and Applications (CG&A), 2019-2021
	IEEE/ACM Transactions on Computational Biology and Bioinformatics, 2021
	ACM Transactions on Intelligent Systems and Technology (TIST), 2017–2018
	ACM Transactions on Interactive Intelligent Systems (TiiS), 2016–2017, 2021
	Journal of Visual Languages and Computing, 2018

Teaching Experience

2016 Fall	**Information Visualization**, *Teaching Assistant*, HKUST.
2016 Fall	**Introduction to Computer Science**, *Teaching Assistant*, HKUST.
2015 Fall	**Java Programming**, *Teaching Assistant*, HKUST.
2015 Spring	**Introduction to Computer Science**, *Teaching Assistant*, HKUST.
2013 Spring	**Distributed Systems**, *Teaching Assistant*, Fudan University.
2012 Fall	**Operating Systems**, *Teaching Assistant*, Fudan University.
2012 Fall	**Formal Languages and Computation Theory**, *Teaching Assistant*, Fudan University.
2012 Spring	**Computer System Engineering**, *Teaching Assistant*, Fudan University.
2011 Fall	**Introduction to Computer Systems II**, *Teaching Assistant*, Fudan University.

Awards and Honors

2016	**ACM SIGCHI Honorable Mention Award of Best Paper**.
2016	**HKUST Overseas Research Award**.
2015	**Microsoft Research Asia Fellowship Nomination Award**.
2015	**Microsoft Research Asia Stars of Tomorrow (Award of Excellence)**.
2012	**Outstanding Student Award of Fudan University**.
2011	**Championship of the 4th IShamrock Software Design Competition**.
2007	**First Prize in National Olympiad in Informatics in Provinces**.

Languages

Mandarin	Native
English	Professional working proficiency