Wei, Yu-Lin

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EDUCATION

PhD Student   Fall 2018 - Now
University of Illinois, Urbana-Champaign, Illinois, U.S
Department of Electrical and Computer Engineering
GPA 4.0/4.0 (till Fall 2021)

Graduate   Fall 2014 - Spring 2016
National Taiwan University, Taipei, Taiwan(R.O.C.)
Department of Computer Science and Information Engineering
GPA 4.20/4.3

Undergraduate   Fall 2010 - Spring 2014
National Taiwan University, Taipei, Taiwan(R.O.C.)
Department of Computer Science and Information Engineering
GPA 4.08/4.3

PUBLICATIONS

[1] Rajalaxmi Rajagopalan, **Yu-Lin Wei**, and Romit Roy Choudhury. Sample-constrained black box optimization for audio personalization. In *Proceedings of the AAAI Conference on Artificial Intelligence*, AAAI'24, 2024.

[2] **Yu-Lin Wei**, Rajalaxmi Rajagopalan, Bashima Islam, and Romit Roy Choudhury. Self-supervised speech enhancement using multi-modal data. In *NeurIPS Workshop on Machine Learning for Audio*, ML for Audio'23, 2023.

[3] Rajalaxmi Rajagopalan, **Yu-Lin Wei**, and Romit Roy Choudhury. Audio personalization through human-in-the-loop optimization. In *NeurIPS Workshop on Machine Learning for Audio*, ML for Audio'23, 2023.

[4] **Yu-Lin Wei** and Romit Roy Choudhury. Angle-of-arrival (AOA) factorization in multi-path channels. In *IEEE International Conference on Acoustics, Speech and Signal Processing*, ICASSP '21. IEEE, 2021.

[5] Zhijian Yang, **Yu-Lin Wei**, Sheng Shen, and Romit Roy Choudhury. Ear-AR: Indoor acoustic augmented reality on earphones. In *ACM International Conference on Mobile Computing and Networking*, MobiCom '20. ACM, 2020.

[6] Jay Prakash, Zhijian Yang, **Yu-Lin Wei**, Haitham Hassanieh, and Romit Roy Choudhury. Earsense: earphones as a teeth activity sensor. In *ACM International Conference on Mobile Computing and Networking*, MobiCom '20, pages 1–13, 2020.

[7] Sheng Shen, Daguan Chen, **Yu-Lin Wei**, Zhijian Yang, and Romit Roy Choudhury. Voice localization using nearby wall reflections. In *ACM International Conference on Mobile Computing and Networking*, MobiCom '20. ACM, 2020.

[8] Zhao Tian, **Yu-Lin Wei**, Wei-Nin Chang, Xi Xiong, Changxi Zheng, Hsin-Mu Tsai, Kate Ching-Ju Lin, and Xia Zhou. Augmenting indoor inertial tracking with polarized light. In *Proceedings of the 16th Annual International Conference on Mobile Systems, Applications, and Services*, MobiSys '18, pages 362–375, 2018.

[9] Zhao Tian, **Yu-Lin Wei**, Xi Xiong, Wei-Nin Chang, Hsin-Mu Tsai, Kate Ching-Ju Lin, Changxi Zheng, and Xia Zhou. Position: Augmenting inertial tracking with light. In *Proceedings of the 4th ACM Workshop on Visible Light Communication Systems*, VLCS '17, pages 25–26, 2017.

[10] **Yu-Lin Wei**, Chang-Jung Huang, Hsin-Mu Tsai, and Kate Ching-Ju Lin. Celli: Indoor positioning using polarized sweeping light beams. In *ACM International Conference on Mobile Systems, Applications, and Services*, MobiSys '17, pages 136–147, 2017.

[11] **Yu-Lin Wei**, Hsin-I Wu, Han-Chung Wang, Hsin-Mu Tsai, Kate Ching-Ju Lin, Rayana Boubezari, Hoa Le Minh, and Zabih Ghassemlooy. LiCompass: extracting orientation from polarized light. In *IEEE INFOCOM 2017 - IEEE Conference on Computer Communications*, INFOCOM '17, 2017.

[12] Chang-Jung Huang, **Yu-Lin Wei**, Chiao Fu, Wen-Hsuan Shen, Hsin-Mu Tsai, and Ching-Ju Kate Lin. Libeamscanner: Accurate indoor positioning with sweeping light beam. In *ACM International Workshop on Visible Light Communications Systems*, VLCS '15, pages 33–38, 2015.

[13] Ai-Ling Chen, Hao-Ping Wu, **Yu-Lin Wei**, and Hsin-Mu Tsai. Time variation in vehicle-to-vehicle visible light communication channels. In *2016 IEEE Vehicular Networking Conference*, VNC '16, pages 1–8, 2016.

[14] Jen-Yin Chang, Kuan-Ying Lee, **Yu-Lin Wei**, Kate Ching-Ju Lin, and Winston Hsu. Location-independent wifi action recognition via vision-based methods. In *Proceedings of the 2016 ACM on Multimedia Conference*, MM '16, pages 162–166, 2016.

[15] Hao-Ping Wu, Wen-Hsuan Shen, **Yu-Lin Wei**, Hsin-Mu Tsai, and Qianyan Xie. Traffic shockwave mitigation with human-driven vehicles: Is it feasible? In *ACM International Workshop on Smart, Autonomous, and Connected Vehicular Systems and Services*, CarSys '16, pages 38–43, 2016.

[16] Hua-Yen Tseng, **Yu-Lin Wei**, Ai-Ling Chen, Hao-Ping Wu, Hsuan Hsu, and Hsin-Mu Tsai. Characterizing link asymmetry in vehicle-to-vehicle visible light communications. In *2015 IEEE Vehicular Networking Conference*, VNC '15, pages 88–95, 2015.

[17] Chiao Fu, Chia-Wen Cheng, Wen-Hsuan Shen, **Yu-Lin Wei**, and Hsin-Mu Tsai. Lightbib: Marathoner recognition system with visible light communications. iThings '15. IEEE, 2015.

[18] Hui-Yu Lee, Hao-Min Lin, **Yu-Lin Wei**, Hsin-I Wu, Hsin-Mu Tsai, and Kate Ching-Ju Lin. Rollinglight: Enabling line-of-sight light-to-camera communications. In *ACM International Conference on Mobile Systems, Applications, and Services*, MobiSys '15, pages 167–180. ACM, 2015.

HONORS AND AWARDS

ECE Rambus Fellowship	University of Illinois, Urbana-Champaign	Fall 2020
Best Demo Runner-up	MobiSys	June 2017
CELLI - Indoor Positioning using Polarized Sweeping Light Beams		
Best Teaching Assistant Awards	National Taiwan University	Fall 2014
The award is given to the top 15% of the teaching assistants.		
The Honorary Member of the Phi Tau Phi Scholastic Honor Society		2014
The award is given to the top 1% of undergraduate students in EECS college.		
Presidential Awards	National Taiwan University	Spring 2012
The award is given to only 5% of the students in the university.		
Presidential Awards	National Taiwan University	Fall 2011

PROFESSIONAL ACTIVITIES

Tutorial talk	MobiCom 2022	Oct. 2022
Invited talk on Earable Computing.		
Heidelberg Laureate Forum	Heidelberg Laureate Forum	Sep. 2019

Invited Talk	Delta Electronic	July 2017
Journal Reviewer	JSAC LCN-VLC 2017	July 2017
Conference Reviewer	IEEE VTC 2017	April 2017
IEEE Standard Meeting	IEEE 802.15.7r1	Jan. 2017
Publication Co-chair	IEEE VNC 2016	Dec. 2016
Journal Reviewer	Elsevier Computer Communications	April 2016

WORK EXPERIENCE

Research Assistant	SyNRG, UIUC Champaign	Sep. 2018 - Now

Teaching Assistant	ECE Department, UIUC Champaign	Fall 2022

Teaching assistant in lesson 'ECE/CS 438: Communication Networks'. Design and grade MP assignment, and answer related problems.

Teaching Assistant	ECE Department, UIUC Champaign	Fall 2021

Teaching assistant in lesson 'ECE/CS 438: Communication Networks'. Design and grade MP assignment, and answer related problems.

Teaching Assistant	ECE Department, UIUC Champaign	Fall 2020

Teaching assistant in lesson 'ECE/CS 438: Communication Networks'. Design and grade MP assignment, and answer related problems.

Research Assistant	NTU IoX Center Taipei, Taiwan(R.O.C)	Sept. 2016 - June. 2018

Conduct and host research projects of 'Next-Generation CamCom'.

Teaching Assistant	CSIE Department, NTU Taipei, Taiwan(R.O.C)	Fall 2017

Teaching assistant in lesson '2017 Fall - Wireless Networking - Fundamentals and Applications'. Design and grade lab assignment, and answer related problems.

Teaching Assistant	Department of CS, NCTU Hsinchu, Taiwan(R.O.C)	Fall 2016

Teaching assistant in lesson '2016 Fall - Wireless Communication Systems'. Design lab assignment, and answer related problems.

Teaching Assistant	CSIE Department, NTU Taipei, Taiwan(R.O.C)	Spring 2016

Teaching assistant in lesson '2016 Spring - Wireless Networking - Fundamentals and Applications'. Design and grade lab assignment, and answer related problems.

Teaching Assistant	CSIE Department, NTU Taipei, Taiwan(R.O.C)	Fall 2014

Teaching assistant in lesson '2014 Fall - Algorithm Design and Analysis'. Design and grade assignments, and answer related problems.

Teaching Assistant   CSIE Department, NTU   Spring 2014
                                    Taipei, Taiwan(R.O.C)

Teaching assistant in lesson '2014 Fall - Network Administration/System Administration Training', Design and grade assignments, and answer related problems.

Summer Intern   Trend Micro   Summer 2013
                                    Taipei, Taiwan(R.O.C)

Help back-end developing and research on solution of detecting virus, contribute an detecting component for production.

Team leader in Network Management Team Wire Department
                                    CSIE Department, NTU   Fall 2012 -
                                    Taipei, Taiwan(R.O.C)   Spring 2013

Maintain network sizing hundreds of people in CSIE Department. Deal all cases and improve the infrastructure of network including re-configuring switches, re-build VLAN environment,and solving networking attacks.

Teaching Assistant   CSIE Department, NTU   Spring 2013
                                    Taipei, Taiwan(R.O.C)

Teaching assistant in lesson '2013 Spring - Data Structure and Algorithm', responsible for designing and judge assignments, answering related problem.