

Fu-Yin Cherng

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Employment History

Computer Science, University of California, Davis

Postdoctoral Researcher

Work with Professor Hao-Chuan Wang

Davis, CA

2019 – present

Education

Computer Science, National Chiao Tung University

Ph.D. Candidate

Supervised by Professor Hao-Chuan Wang

Hsinchu, Taiwan

2014 – 2019

Computer and Communication Sciences, EPFL

Doctoral Research Assistant

Supervised by Professor Pierre Dillenbourg and Robert West

Lausanne, Switzerland

2016 – 2017

Computer Science, National Chiao Tung University

Master Student

Supervised by Professor Wen-Chieh Lin

Hsinchu, Taiwan

2013 – 2014

Computer Science, National Chiao Tung University

Bachelor Degree

Supervised by Professor Jung-Hong Chuang

Hsinchu, Taiwan

2009 – 2013

Publications

Xun-Yi Huang, **Fu-Yin Cherng**, Jung-Tai King, Wen-Chieh Lin. "EEG-based Measures of Auditory Saliency in a Complex Context." Proceedings of the 21th International Conference on Human-Computer Interaction with Mobile Devices and Services. ACM, 2019.

Meng-Yun Liao, Ching-Ying Sung, Hao-Chuan Wang, Wen-Chieh Lin, **Fu-Yin Cherng**. "Embodying Historical Learners' Messages as Learning Companions in a VR Classroom." Extended Abstracts of the 2019 CHI Conference on Human Factors in Computing Systems. ACM, 2019.

Fu-Yin Cherng, Wen-Chieh Lin, Jung-Tai King, Yi-Chen Lee. "Measuring the Influences of Musical Parameters on Cognitive and Behavioral Responses to Audio Notifications Using EEG and Large-scale Online Studies" Proceedings of the SIGCHI Conference on Human Factors in Computing Systems. ACM, 2019.

Yi-Chen Lee, **Fu-Yin Cherng**, Wen-Chieh Lin, Jung-Tai King. "To Repeat or Not to Repeat?: Redesigning Repeating Auditory Alarms Based on EEG Analysis" Proceedings of the SIGCHI Conference on Human Factors in Computing Systems. ACM, 2019.

Cherng, Fu-Yin, Wen-Chieh Lin, Jung-Tai King, and Yi-Chen Lee. "Understanding the Influence of Musical Parameters on Cognitive Responses of Audio Notifications." Extended Abstracts of the 2018 CHI Conference on Human Factors in Computing Systems. ACM, 2018.

Ching-Ying Sung, Xun-Yi Huang, Yicong Shen, **Fu-Yin Cherng**, Wen-Chieh Lin, and Hao-Chuan Wang. "Exploring online learners' interactive dynamics by visually analyzing their time-anchored comments." In Computer Graphics Forum, volume 36, pages 145–155. Wiley Online Library, 2017.

Ching-Ying Sung, Xun-Yi Huang, Yicong Shen, **Fu-Yin Cherng**, Wen-Chieh Lin, and Hao-Chuan Wang. "Topin: A visual analysis tool for time-anchored comments in online educational videos." In Proceedings of the 2016 CHI Conference Extended Abstracts on Human Factors in Computing Systems. ACM, 2016.

Fu-Yin Cherng, Wen-Chieh Lin, Jung-Tai King, Yi-Chen Lee. "An EEG-based Approach for Evaluating Graphic Icons from the Perspective of Semantic Distance" Proceedings of the SIGCHI Conference on Human Factors in Computing Systems. ACM, 2016 (**Honorable Mention Award, 4 % of all submitted paper**).

Yi-Chieh Lee, Wen-Chieh Lin, **Fu-Yin Cherng**, Li-Wei Ko. "A visual attention monitor based on steady-state visual evoked potential." IEEE Transactions on Neural Systems and Rehabilitation Engineering 24.3 (2015): 399-408.

Hsin-Yang Ho, I-Cheng Yeh, Yu-Chi Lai, Wen-Chieh Lin, and **Fu-Yin Cherng**. "Evaluating 2d flow visualization using eye tracking." In Computer Graphics Forum, volume 34, pages 501–510. Wiley Online Library, 2015.

Sheng-Fu Liang, Chin-En Kuo, Yi-Chieh Lee, Wen-Chieh Lin, Yen-Chen Liu, Peng-Yu Chen, **Fu-Yin Cherng**, and Fu-Zen Shaw. "Development of an eog-based automatic sleep-monitoring eye mask." IEEE Transactions on Instrumentation and Measurement, 64(11):2977–2985, 2015.

Yi-Chieh Lee, Wen-Chieh Lin, **Fu-Yin Cherng**, Hao-Chuan Wang, Ching-Ying Sung, Jung-Tai King. "Using Time-Anchored Peer Commenting to Enhance Social Interaction in Online Educational Videos." Proceedings of the SIGCHI Conference on Human Factors in Computing Systems. ACM, 2015.

Lee, Yi-Chieh, Wen-Chieh Lin, Jung-Tai King, Li-Wei Ko, Yu-Ting Huang, and **Fu-Yin Cherng**. "An EEG-based approach for evaluating audio notifications under ambient sounds." Proceedings of the 32nd annual ACM conference on Human factors in computing systems. ACM, 2014 (**Honorable Mention Award, 5 % of all submitted paper**).

Chih-En Kuo, Sheng-Fu Liang, Yi-Chieh Lee, **Fu-Yin Cherng**, Wen-Chieh Lin, Peng-Yu Chen, Yen-Chen Liu, Fu-Zen Shaw. "An EOG-based automatic sleep scoring system and its related application in sleep environmental control." International Conference on Physiological Computing Systems. Springer, 2014.

Chih-En Kuo, Sheng-Fu Liang, Yi-Chieh Li, **Fu-Yin Cherng**, Wen-Chieh Lin, Peng-Yu Chen, Yen-Chen Liu, and Fu-Zen Shaw. "An eog-based sleep monitoring system and its application on on-line sleep-stage sensitive light control." In PhyCS, pages 20–30, 2014.

International Conference

Student Volunteer Chair

Taipei, Taiwan

MobileHCI 2019

Presenter

Glasgow, UK

ACM CHI 2019

Presenter

Montréal, Canada

ACM CHI 2018

Presenter

San Jose, USA

ACM CHI 2016

Presenter

Seoul, Korea

ACM CHI 2015

Languages

Mandarin: Native Speaker

English: Adequate

Computer Skills

Programming: C, C++, Java, Python, CSS, HTML, JavaScript, PHP, Python, Keras, R, Matlab, Latex

Others: Natural Languages Processing, Data Analysis, Applied Machine Learning, Statistical Analysis, EEG Signal Analysis