Fu-Yin Cherng

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Education

Computer Science, National Chiao Tung University — **Hsinchu, Taiwan**
Ph.D. Candidate — *2013 – present*
Supervised by professor Wen-Chieh Lin

Computer and Communication Sciences, EPFL — **Lausanne, Switzerland**
Doctoral Research Assistant — *2016 – 2017*
Supervised by professor Pierre Dillenbourg and Robert West

Computer Science, National Chiao Tung University — **Hsinchu, Taiwan**
Bachelor Degree — *2009 – 2013*
Supervised by professor Jung-Hong Chuang

Research Interests and Selected Publications

Research Interests: Human-Computer Interaction, Brain-Computer Interface, Learning Analytics and Identify Users' Cognitive Process with Physiological Measurements.

Selected Publications:

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.

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.

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.

Research Projects

EEG-based Approach for Graphic and Audio Icons Evaluation (2015-present): *The goal of this project is to reveal important but hitherto neglected implications for graphic-icon design by proposing new evaluation method based on detecting users' brain signal (Electroencephalography, EEG).* I am the initiator and leader of this project. My works include research literature survey, design and conduct experiments, statistical analysis and identify findings. We published this work as a full paper in CHI 2016, and a late-breaking work in CHI 2018.

Detect Hidden Training Needs Using Job Ads (2016-2017): *The goal of this project is to find emerging jobs by empirically analyzing job advertisements (job ads) in the online job board.* I am the main executor of this project. My jobs include collection of dataset of yearly job ads, using natural language processing to extract skills and topics of requirements, and interpretation of the results from exploratory analysis. This project is sponsored by the federal Department of the Economy, training and research of Switzerland.

Application of Time-anchored Peer Comments in Online Learning (2014-2016): *The goal of this project is to enhanceexperienceofonlinelearnersandinstructorsbyapplyingandanalyzingtime-anchored comments.* In this project, I conducted the experiment and interview. I also statistically analyzed the features of time-anchored comments under different experimental conditions to identify the important findings. We published this work in CHI 2015 and in Computer Graphics Forum 2017.

Experience

International Conference

Attendee — **Montréal, Canada**
ACM CHI 2018 — *2014*

Attendee — **Lausanne, Switzerland**
Machine Learning Day — *2017*

Presenter — **San Jose, USA**
ACM CHI 2016 — *2016*

Presenter — **Seoul, Korea**
ACM CHI 2015 — *2015*

Attendee — **Toronto, Canada**
ACM CHI 2014 — *2014*

Activities and Work Experience

Social Welfare Organization Assisting Teenage School Drop-outs — **Hsinchu, Taiwan**
Volunteer Tutor — *2015 – 2016*

Industrial Technology Research Institute of Taiwan — **Hsinchu, Taiwan**
Contractor — *2015 – 2016*

Languages

Mandarin: Native Speaker

English: Adequate

Computer skills

Programming: C, C++, Java, PHP, Python, R, Matlab, Latex

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