

Education

XDiscovery lab at Dartmouth College

PhD of Science - Computer Science

Hanover, NH, USA

Sept. 2018 - Now

Mobile & HCI lab at National Taiwan University

Master of Science - Computer Science and Engineering

Taipei, Taiwan

Sept. 2015 - Sept. 2017

- GPA: 4.06/4.3

National Taipei University of Technology

Bachelor of Science - Computer Science and Engineering

Taipei, Taiwan

Sept. 2011 - Sept. 2015

- GPA: 3.79/4
- Best undergraduate research project award.

Publications

[MobileHCI 2018] ARPilot: 6DOF Direct-Manipulation Interface for Drone Videography using Augmented Reality on Mobile Devices

- Developed a mobile AR application allowing users to plan drone paths by cinematic approaches.
- Conducted a study to compare the performance and mental load between ARPilot and the state-of-art approach.

[CHI 2018] ActiveErgo: Automatic and Personalized Ergonomics using Self-actuating Furniture

Yu-Chian Wu, **Te-Yen Wu**, Yu-Chih Lin, Pin-sung Ku, Paul Taele, Po-En Lai, Bryan Wang, Mike Y. Chen

- A system combines sensing and self-actuating furniture to provide automatic and personalized ergonomics of computer workspaces.
- Conducted a 21-person field study to investigate how ergonomics are implemented in practice.
- Conducted a 12-person study to compare our system to manual adjustment based on ergonomics guidelines.

[CHI 2018] SpeechBubbles: Enhancing the Captioning Experience for Users with Hearing-impairment in Group Conversations

Ming-Mei Hsu, Yi-Hao Peng, Ting-Tu Lin, Leon Hsu, Po-En Lai, Paul Taele, **Te-Yen Wu**, Hsien-Hui Tang, Mike Y. Chen

- Evaluated AR captioning interface designs to support users with hearing-impairment to participate in face-to-face group conversations.
- Developed a SpeechBubbles prototype with real-time speech recognition on HoloLens.

[UIST 2017] CircuitSense: Automatic Sensing of Physical Circuits and Generation of Virtual Circuits to Support Software Tools.

Te-Yen Wu, Bryan Wang, Jiun-Yu Lee, Hao-Ping Shen, Yu-Chian Wu, Yu-An Chen, Pin-Sung Ku, Ming-Wei Hsu, Yu-Chih Lin, Mike Y. Chen

- A system combines passive sensing and active probing to detect and virtualize physical circuits in real-time.
- Built Random Forest Classifier models to identify component type.
- Analyzed wave signals to detect component specification.

[UIST 2017] CurrentViz: Sensing and Visualizing Electric Current of Breadboarded Circuits

Te-Yen Wu, Hao-Ping Shen, Yu-Chian Wu, Yu-An Chen, Pin-Sung Ku, Ming-Wei Hsu, Jun-You Liu, Yu-Chih Lin, Mike Y. Chen.

- A system senses and visualizes the electric current flowing through a circuit for the quick understanding of invisible circuit behavior.
- Optimized circuit board design to reduce 18% multiplexers and 60% PCB traces.

[UIST 2016] CircuitStack: Supporting Rapid Prototyping and Evolution of Electronic Circuits

Chiuan Wang, Hsuan-Ming Yeh, Bryan Wang, **Te-Yen Wu**, Hsin-Ruey Tsai, Rong-Hao Liang, Yi-Ping Hung, Mike Y. Chen.

- A system combining the flexibility of breadboard with the correctness of printed circuits for enabling rapid and extensible circuit construction.
- Developed the software extension that allowed users to quickly generate physical printed circuits from the virtual circuits diagram.

[ACM Multimedia 2015] Giggler: An Intuitive, Real-Time Integrated Wireless In-Ear Monitoring and Personal Mixing System using Mobile Devices

Andries Valstar, Min-Chieh Hsiu, **Te-Yen Wu**, Mike Y. Chen

- Developed a wireless in-ear monitoring and personal mixing experience that was easier to setup, easier to use, faster to control and more accessible for musicians.

Posters & Demos

[VRST 2017 Poster] EyeExpression: Exploring The Use of Eye Expressions As Hands-free Input for Virtual and Augmented reality devices *Pin-Sung Ku, Te-Yen Wu, and Mike Y. Chen.*

[VRST 2017 Poster] PeriText+: Utilizing Peripheral Vision for Reading Text on Augmented Reality Smart Glasses

Yu-Chih Lin, Jun-You Liu, Yu-Chian Wu, Pin-Sung Ku, Katherine Chen, Te-Yen Wu, Yu-An Chen, and Mike Y. Chen.

[UIST 2017 Demo] CurrentViz: Sensing and Visualizing Electric Current of Breadboarded Circuits

Te-Yen Wu, Hao-Ping Shen, Yu-Chian Wu, Yu-An Chen, Pin-Sung Ku, Ming-Wei Hsu, Jun-You Liu, Yu-Chih Lin, and Mike Y. Chen.

[CHI 2017 Poster] SegTouch: Enhancing Touch Input While Providing Touch Gestures on Screens Using

Thumb-To-Index-Finger Gestures *Hsin-Ruey Tsai, Te-Yen Wu, Da-Yuan Huang, Min-Chieh Hsiu, Jui-Chun Hsiao, Yi-Ping Hung, Mike Y.*

Chen, and Bing-Yu Chen

[CHI 2017 Student Game Competition] Party Animals: Creating Immersive Gaming Experience for Physically

Co-present VR and Non-VR Players *Ming-Wei Hsu, Te-Yen Wu, Yu-Chian Wu, Yu-An Chen, Yu-Chih Lin, and Pin-Sung Ku.*

[UIST 2016 Demo] CircuitStack: Supporting Rapid Prototyping and Evolution of Electronic Circuits

Chiuan Wang, Hsuan-Ming Yeh, Bryan Wang, Te-Yen Wu, Hsin-Ruey Tsai, Rong-Hao Liang, Yi-Ping Hung, and Mike Y. Chen.

Experience

Research Assistant

Mobile & HCI Lab, at National Taiwan University (Prof. Mike Chen)

- Mentoring junior graduate students.

Taipei, Taiwan

Sept. 2017 - Present

Android App Intern

Yahoo! Inc.

- Developed Android media applications.
- Best internship project finalist.

Taipei, Taiwan

July. 2017 - Aug. 2017

Software Engineering Intern

Bearsoft Inc.

- Developed an instant messaging application for iOS.
- Built backend services for account and file management.

Taipei, Taiwan

Feb. 2015 - Jun. 2015

Skills

Programming Languages C/C++, Python, JAVA, Node, Objective-C, Swift, C#

Application Software Android Studio, Xcode, Xamarin, QT, Unity

Embedded System Arduino, Raspberry Pi, Keil-ARM Cortex M4

Languages Chinese(Native Speaker), English(Fluent)