

YEN-TING YEH

<https://yentingyeh.com/>

y6yeh@uwaterloo.ca • allenye1105@gmail.com

22 Fairmount Rd., Kitchener, Ontario, Canada, N2H 2G3

EDUCATION

- Ph.D in Cheriton School of Computer Science** May. 2018 - present
University of Waterloo, Waterloo, Canada.
Research Area: HCI - Input technology
- M.S. in Graduate Institute of Networking and Multimedia** Aug. 2012 - Jul. 2014
National Taiwan University, Taipei, Taiwan.
Thesis: On Generating Vehicle Surrounding Images Based on Depth-Adaptive 3D Model
GPA: 3.85/4.3
- B.S. in Computer Science and Information Engineering** Sep. 2008 - Jun. 2012
National Taiwan University, Taipei, Taiwan.
GPA: 3.69/4.0; Major: 3.72/4.0
- Exchange student in Computer and Information Science** Aug. 2011 - Dec. 2011
University of Delaware, Newark, DE
GPA: 3.41/4.0; Major: 4.0/4.0

RESEARCH INTERESTS

Human-Computer Interaction, Computer Vision, Graphics, Multimedia, Information Visualization

SELECTED RESEARCH EXPERIENCE

- Human-Computer Interaction lab**, University of Waterloo, Canada **Advisor: Dr. Daniel Vogel**
- **Mobile Input Technology** Jun. 2018 - present
 - Study the input technology of mobile devices.
- IMLab**, National Taiwan University, Taiwan **Advisor: Dr. Yi-Ping Hung**
- **Driver Assistance System**[5] Jan. 2013 - Jul. 2014
 - Develop a real-time vehicle surrounding monitoring system that can assist drivers to perceive the vehicle surrounding situations in third-person viewpoints.
 - Synthesize the vehicle surrounding images based on multiple perspective corrected images.
 - Integrate depth information to solve ghost effect and image distortion.
 - **Touchsense**[4] Aug. 2013 - Dec. 2013
 - Provide additional touchscreen input vocabulary by distinguishing the contact areas of finger pads on the touchscreen.
 - Develop a smart watch prototype using inertial measurement sensors.
 - Collect user feedback via an explorative study.
 - **I-m-cave**[3] Nov. 2013 - Mar. 2014
 - Develop a multi-touch tabletop system for virtual tours of Mogao Caves.
 - Design interactive interface that allows users to explore every corner of Mogao Caves and restore digital artifacts.

- **MovIPrint[1]** Jan. 2017 - present
 - Propose a framework that encodes full body movement into fabricable models.
 - Create organic and unexpected crafts using existing fabrication methods, including 2D textile print, animation, modular design, laser cutting, CNC milling, and 3D printing.
- **MovISee[2]** Mar. 2012 - present
 - Propose a system to recreate information and explore personal creativity.
 - Create mixed reality for people to explore the selected information and ultimately transform their understanding of their body movement to create composite customized visual outputs.
 - Demos available at <http://movisee.com>.

WORK EXPERIENCE

Software Engineer, Garmin, Taiwan Oct. 2014 - Mar. 2018

- Develop the software of GPS running watch and bike computers.
- Improve the fitness training algorithm based on signal processing.
- Use the ANT+ wireless protocol to connect devices with sensors and display sensor information.
- Collaborate with software and electronic engineers to achieve mass production.

Administrative Assistant, National Taiwan University, Taiwan Sep. 2012 - Jun. 2014

- Organize activities and support foreign students in department.
- Assist in foreign guests' visits or international seminars.

PUBLICATIONS

- [1] Yen-Ting Cho, Yen-Ling Kuo, **Yen-Ting Yeh**, and Yi-Chin Lee. Moviprint: move, explore and fabricate. In *Proceedings of the 27th ACM International Conference on Multimedia, MM 2019, Nice, France, October 21-25, 2019*, pages 1151–1152, 2019.
- [2] Yen-Ting Cho, Yen-Ling Kuo, and **Yen-Ting Yeh**. Movisee. In *SIGGRAPH ASIA 2016, Macao, December 5-8, 2016 - Art Gallery*, 4:1, 2016.
- [3] Da-Yuan Huang, Shen-Chi Chen, Li-Erh Chang, Po-Shiun Chen, **Yen-Ting Yeh**, and Yi-Ping Hung. I-m-cave: an interactive tabletop system for virtually touring mogao caves. In *IEEE International Conference on Multimedia and Expo, ICME 2014, Chengdu, China, July 14-18, 2014*, pages 1–6, 2014.
- [4] Da-Yuan Huang, Ming-Chang Tsai, Ying-Chao Tung, Min-Lun Tsai, **Yen-Ting Yeh**, Li-Wei Chan, Yi-Ping Hung, and Mike Y. Chen. Touchsense: expanding touchscreen input vocabulary using different areas of users' finger pads. In *CHI Conference on Human Factors in Computing Systems, CHI'14, Toronto, ON, Canada - April 26 - May 01, 2014*, pages 189–192, 2014.
- [5] **Yen-Ting Yeh**, Chun-Kang Peng, Kuan-Wen Chen, Yong-Sheng Chen, and Yi-Ping Hung. Driver assistance system providing an intuitive perspective view of vehicle surrounding. In *Computer Vision - ACCV 2014 Workshops - Singapore, Singapore, November 1-2, 2014, Revised Selected Papers, Part II*, pages 403–417, 2014.

HONORS AND AWARDS

First Place, 12th Mobile Heroes, Taiwan 2013
 With **HTC Corporation Award** and **Qualcomm Corporation Award**.

First Place, 8th Utechzone Machine Vision Prize, Taiwan 2013
 With **Facial Expression Recognition Champion** and **Face Recognition Champion**.

Dean's list, University of Delaware, DE
In recognition of scholastic excellence at University of Delaware.

2011

SKILLS

Programming language	C/C++, JAVA, Matlab,
Tools and Libraries	Processing, OpenFramework, OpenCV, OpenGL, CGAL, OpenNI,
Hardware Platforms	Kinect, Arduino.