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Professional Experiences:

Assistant Professor, 2016-
Department of Electrical and Computer Engineering
National Chiao Tung University, Taiwan

Postdoctoral Associate, 2013-2016
Robotics, Vision, and Sensor Networks Group & Marine Robotics Group,
Computer Science and Artificial Intelligence Laboratory,
Massachusetts Institute of Technology (MIT), MA, USA.

Committee Member,
MIT Committee on the Use of Humans as Experimental Subjects. 2014-2015
NCTU Research Ethics Committee for Human Subject Protection. 2016-2017

Program Committee Member,
CVPR Workshop on Vision Meets Cognition (2015, 2014). SIGGRAPH Asia Workshop
on Virtual Reality Meets Physical Reality (2016).

Reviewer,
IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2019, 2018,
2016), IEEE International Conference on Robotics and Automation (ICRA 2017, 2015),
IEEE on System, Man, and Cybernetics, Part A, Systems and Humans, IEEE
Transactions on Robotics, IEEE Robotics and Automation Letters

Education

Ph.D. in Computer Science, University of Massachusetts at Boston. 2012
M.A. in Computer-Aided Engineering, 2003
Department of Civil Engineering, National Taiwan University, Taiwan.
B.S. in Civil Engineering, National Taiwan University, Taiwan. 2001

Important Events and Awards:

Qualified to Complete in the DARPA Subterranean Challenge 2019
Lead Team NCTU to Participate the SubT Tunnel Circuit in Pittsburgh, USA

Co-host AI Driving Olympics in NeurIPS 2018 2018

Won 5th Place in the Maritime RobotX Challenge 2018
Lead Team NCTU to Participate the RobotX Competition in Hawaii, USA

WAM-V Award (with a 75,000 USD Surface Vehicle) 2017
Association for Unmanned Vehicle Systems International, USA

Young Electrical Engineer Award 2017
The Chinese Institute of Electrical Engineering, Taiwan

MediaTek Junior Chair Professor 2016
National Chiao Tung University, Taiwan

Outstanding Research Talents, 2015
Ministry of Science and Technology (MOST), Taiwan

Young Professional Travel Grant, National Science Foundation, USA 2014
Student Travel Award, Cognitive Science Society (Top 3%) 2012

Press Release and News Articles:

DARPA News, "DARPA Identifies Teams Qualified to Compete in First Scored Event of SubT Challenge," May 21, 2019. [Link](#)

Defense Visual Information Distribution Service, "2018 Maritime RobotX Challenge," Dec 13, 2018. [Link](#)

Economist, "White cane 2.0 - Helping blind people navigate," June 8, 2017. [Link](#)

MIT News, "Self-driving cars, meet rubber duckies," April 20, 2016. [Link](#)

MIT News, "CSAIL, MechE marine experts win international self-driving boat competition," Oct. 30, 2014. [Link](#)

MIT News, "Italian tenor Andrea Bocelli visits MIT in support of assistive technology and global poverty reduction," Dec. 9, 2013. [Link](#)

Recent Publications:

- [1] N.-C. Lin, Y.-C. Hsiao, Y.-W. Huang, C.-T. Hung, T.-K. Chuang, P.-W. Chen, J.-T. Huang, C.-C. Hsu, A. Censi, M. Benjamin, C.-F. Chen, and **H.-C. Wang**, "Duckiepond: An Open Education and Research Platform for a Fleet of Autonomous Maritime Vehicles," Accepted by *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2019)*.
- [2] Y.-S. Su, S.-H. Lu, P.-S. Ser, W.-T. Hsu, W.-C. Lai, B. Xie, H.-M. Huang, T.-Y. Lee, H.-W. Chen, L.-F. Yu, **H.-C. Wang**, "Pose-aware Placing with Semantic Labels - Brandname-based Affordance Prediction and Cooperative Dual-Arm Active Manipulation," Accepted by *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2019)*.
- [3] N.-C. Lin, S.-H. Liu, Y.-W. Huang, Y.-S. Su, C.-L. Lu, W.-T. Hsu, L.-W. Chiu, S. Teng, L. Giarré, **H.-C. Wang**. "Toward an Open Platform of Blind Navigation via Interactions with Autonomous Robots," In *ACM Conference on Human Factors in Computing Systems (CHI 2019) - Blind Navigation Workshop*, Glasgow, UK.
- [4] R. Alghofaili, Y. Sawahata, H. Huang, **H.-C. Wang**, T. Shiratori, L.-F. Yu. "Gaze-driven Adaptive Aid for VR Navigation". *Proceedings of the ACM Conference on Human Factors in Computing Systems (CHI 2019)*, Glasgow, UK.
- [5] Huang, H.-K., Lin, N.-C., Barrett, L., Springer, D., **Wang, H.-C.**, Pomplun, M., and Yu, L.-F. Automatic Optimization of Wayfinding Design, *Transactions on Visualization and Computer Graphics (TVCG)*. 2018.
- [6] T.-K. Chuang, N.-C. Lin, J.-S. Chen, C.-H. Hung, Y.-W. Huang, Chunchih Teng, Haikun Huang, L.-F. Yu, Laura Giarre, and **H.-C. Wang**. "Deep Trail-Following Robotic Guide Dog in Pedestrian Environments for People who are Blind and Visually Impaired - Learning from Virtual and Real Worlds," *IEEE International Conference on Robotics and Automation (ICRA 2018)*, Australia.
- [7] Andrea Censi, Liam Paull*, Jacopo Tani, Thomas Ackermann, Oscar Beijbom, Berabi Berkai, Gianmarco Bernasconi, Anne Kirsten Bowser, Simon Bing, P.-W. Chen, Y.-C. Chen, Maxime Chevalier-Boisvert, Breandan Considine, Justin De Castri, Maurilio Di Cicco, Manfred Diaz, Paul Aurel Diederichs, Florian Golemo, Ruslan Hristov, Lily Hsu, Y.-W. Huang, C.-H. Hung, Q.-S. Jia, Julien Kindle, Dzenan Lapandic, C.-L. Lu, Sunil Mallya, Bhairav Mehta, Aurel Neff, Eryk Nice, Y.-H. Ou, Abdelhakim Qbaich, Josefine Quack, Claudio Ruch, Adam Sigal, Niklas Stolz, Alejandro Unghia, Ben Weber, Sean Wilson, Z.-X. Xia, Timothius Victorio Yasin, Nivethan, Yogarajah, Julian Zilly, Yoshua Bengio, Tao Zhang, **H.-C. Wang**, Stefano Soatto, Magnus Egerstedt, and Emilio Frazzoli. "The AI Driving Olympics at NIPS 2018," *Robotics: Science and System (RSS) Workshop on New Benchmarks, Metrics, and Competitions for Robotic Learning*, Pittsburgh.
- [8] **H.-C. Wang**, R. Katschmann, S. Teng, B. Araki, L. Giarré, and D. Rus, "Enabling independent navigation for visually impaired people through a wearable vision-based feedback system," in *Robotics and Automation (ICRA), IEEE International Conference on*, 2017.

- [9] L. Paull, J. Tani, H. Ahn, J. Alonso-Mora, L. Carlone, M. Cap, Y. F. Chen, C. Choi, J. Dusek, Y. Fang, D. Hoehener, S.-Y. Liu, M. Novitzky, I. F. Okuyama, J. Papis, G. Rosman, V. Varricchio, **H.-C. Wang**, D. Yershov, H. Zhao, M. Benjamin, C. Carr, M. Zuber, S. Karaman, E. Frazzoli, D. D. Vecchio, D. Rus, J. How, J. Leonard, and A. Censi, "Duckietown: an Open, Inexpensive and Flexible Platform for Autonomy Education and Research," in *Robotics and Automation (ICRA), IEEE International Conference on*, 2017.
- [10] Jeon, D., Ickes, N., Raina, P., **Wang, H. C.**, & Chandrakasan, A. P. A 0.6V, 8mW 3D Vision Processor for a Navigation Device for the Visually Impaired. *International Solid-State Circuits Conference (ISSCC)*, San Francisco, USA, 2016.
- [11] **H.-C. Wang**, C. Finn, L. Paull, M. Kaess, R. Rosenholtz, S. Teller, and J. Leonard, "Bridging text spotting and SLAM with junction features," in *IEEE/RSJ Intl. Conf. on Intelligent Robots and Systems (IROS)*, 2015. 機器人領域重要會議
- [12] A. Anderson, E. Fischell, T. Howe, T. Miller, A. Parrales-Salinas, N. Rypkema, D. Barrett, M. Benjamin, A. Brennen, M. DeFillipo, J. J. Leonard, L. Paull, H. Schmidt, **H.-C. Wang**, and A. Yaari, "An Overview of MIT-Olin Approach in the AUVSI RobotX Competition," *10th Conference on Field and Service Robotics (FSR)*, 2015.
- [13] Wang, H. C., Landa, Y., Fallon, M., & Teller, S. Spatially Prioritized and Persistent Text Detection and Decoding. *Fifth International Workshop on Camera-Based Document Analysis and Recognition (CBDAR)*, Washington D. C., USA, 2013.