

## CHING-YAO CHAN'S RECENT PUBLICATIONS, 2015-2019

- Pin Wang, Hanhan Li, Ching-Yao Chan, "Structured Quadratic Q-network for Learning Continuous Vehicle Control", Paper 20-02002, *Transportation Research Board Meeting*, presentation only, January 2020.
- Sanaz Motamedi, Pei Wang, Teresa Canas Bajo, Shouming Qi, David Whitney, Ching-Yao Chan, Yaping Zhang, "External Interface of Automated Driving Systems: Communication and Interaction with Pedestrians", Paper 20-03984, *Transportation Research Board Meeting*, January 2020.
- Pei Wang, Tingting Zhang, Xiao Zhou, Sanaz Motamedi, Ching-Yao Chan, Yaping Zhang, "Freeway Traffic Sign Design for Interstate 80 Smart Corridor in California: A Driving Simulator Study", Paper 20-03907, *Transportation Research Board Meeting*, January 2020.
- Yanli Ma, Shouming Qi, Guan Lian, Jieyu Zhu, Ching-Yao Chan, Yaping Zhang, "An On-Road Driving Test of Cognitive Distraction: Characteristics of Drivers' Visual Behavior," Paper 20-02501, *Transportation Research Board Meeting*, January 2020.
- Hongyu Hu, Jiarui Liu, Pin, Wang, Ching-Yao Chan, "Driver Identification Using 1-D Convolutional Neural Networks with Vehicular CAN Signals," Paper 20-01857, *Transportation Research Board Meeting*, January 2020.
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- Long Xin, Shengbo Eben Li\*, Pin Wang, Yulin Wang, Bingbing Nie, Ching-Yao Chan, Bo Cheng, "Accelerated Inverse Reinforcement Learning with Randomly Pre-sampled Policies for Autonomous Driving Reward Design," *IEEE Intelligent Transportation System Conference*, October 2019.
- Tianyu Shi, Pin Wang\*, Xuxin Cheng, Ching-Yao Chan, "Driving Decision and Control for Autonomous Lane Change based on Deep Reinforcement Learning," *IEEE Intelligent Transportation System Conference*, October 2019.
- Mengyu Guo, Pin Wang, Ching-Yao Chan, Sid Askary, "A Reinforcement Learning Approach for Intelligent Traffic Signal Control at Urban Intersections," *IEEE Intelligent Transportation System Conference*, October 2019.
- Tingting Li, Jianping Wu, Ching-Yao Chan, "Evolutionary Learning in Decision Making for Lane Change," *IEEE Intelligent Transportation System Conference*, October 2019.

- I-Ming Chen, Ching-Yao Chan, "A Deep Reinforcement Learning-Based Approach to Intelligent Powertrain Control for Automated Vehicles," *IEEE Intelligent Transportation System Conference*, October 2019.
- S. Motamedi, P. Wang, C-Y Chan, "Acceptance of Full Driving Automation: Personally-Owned and Shared-Use Concepts," to appear in *Human Factors: The Journal of the Human Factors and Ergonomics Society*.
- P. Wang, C-Y Chan, "Continuous Control for Automated Lane Change Behavior Based on Deep Deterministic Policy Gradient Algorithm," *IEEE Intelligent Vehicles*, June 2019.
- P. Wang, et al., "A Data Driven Method of Optimizing Feedforward Compensator for Autonomous Vehicle," *IEEE Intelligent Vehicles*, June 2019.
- L. Sun, W. Zhan, C-Y Chan, M. Tomizuka "Behavior Planning of Autonomous Vehicles with Social Perception," *IEEE Intelligent Vehicles*, June 2019.
- B. Yang, P. Liu, C-Y Chan, C. Xu, Y. Guo, "Identifying the crash characteristics on freeway segments based on different ramp influence areas" *Traffic Injury Prevention*, Online, April 25 2019, pp. 386-391, Volume 20, 2019 - Issue 4.
- Pin Wang, C-Y Chan, "Driving Maneuver Learning via Reinforcement Learning for Automated Vehicles in An Interactive Environment," *TRB 2019 Annual Meeting*, Paper 19-01116, January 2019.
- Pei Wang, T. Zhang, C-Y Chan, "Evaluation of Messages on Information Display Board (IDB) Using Laboratory Experiment," *TRB 2019 Annual Meeting*, Paper 19-04354, January 2019.
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- Y. Liu, W-B Zhang, Z-L. Wang, C-Y Chan, "DSRC-Based End-of-Queue Warning System," *IEEE Intelligent Vehicles Conference*, Los Angeles, June 2017.
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- L. Bai, C-Y Chan, P. Liu, C. Xu, "Identifying Factors Affecting the Safety of Mid-Block Bicycle Lanes Considering Mixed Two-Wheeled Traffic Flow," *Traffic Injury Prevention*, pp. 761-766, Vol. 18, 2017, Issue 7, posted online March 2017.
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- P. Wang, C-Y Chan, J. Wang, S. Fang, "An Examination of Traffic Patterns at Signalized Intersections via Use of a Network of Discrete Sensors," *14<sup>th</sup> World Conference of Transport Research*, Shanghai, China, July 2016.
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- T-H Wu, C-W Yi, C-Y, Chan, "A Preliminary Study on SPC-Crowd Pavement Indexing," *The Asia-Pacific Network Operations and Management Symposium (APNOMS) 2015*, Busan, Korea, August 2015.
- C. Nowakowski, S. Shaldiver, C-Y Chan, H-S Tan, "Development of California Regulations to Govern the Testing and Operation of Automated Driving Systems," *Transportation Research Records* 2489, pp. 137-144, 2015.
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- H. Lo, J-C Chen, C-Y Chan, S-C Lin, "Deployment of A Vehicle Occupant Detection System for High-Occupancy Lane Operation," *ITS Asia Pacific Conference*, Nanjing, China, April 2015.

## CHING-YAO CHAN'S PREVIOUS PUBLICATIONS, UP TO 2014

### Book

- C-Y. Chan, "Fundamental of Crash Sensing for Automotive Air Bag Systems," Society of Automotive and Aerospace Engineers (SAE), February 2000, ISBN 0-7680-0499-3.

### Book Chapters

- F. Bu, C-Y Chan, "Adaptive and Cooperative Cruise Control," *Handbook of Intelligent Vehicles*, Feb. 2012, **ISBN-13**: 978-0857290847.
- C-Y. Chan, "Occupant Restraint Systems," McGraw-Hill 2006 Yearbook of Science and Technology, December 2005, ISBN: 0-0714-6205-8.

### Archival Journal Publications (21)

- X. Li, W. Chen, C-Y Chan, "A Reliable Multi-Sensor Fusion Strategy for Lane Vehicle Positioning Using Low-Cost Sensors," *Proceedings of the Institution of Mechanical Engineers, Part D*, Vol. 228, No. 12, pp. 1375-1397, October 2014.
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- W-B Zhang, et al., "Deployment Challenges for Truck Platoon," *ITS World Congress 2014*, Detroit, September 2014.
- C-Y Chan, T. Oda, M. Koga, "Vehicle Connectivity and Automation for Aging Society," *ITS Europe 2014*, Helsinki, Finland, June 2014.
- J. Huang, K. Jang, C-Y Chan, "Investigating the Correlation of Truck Collision Concentration and High Incidence of Overweight Trucks in California," *ITS Asia Pacific 2014*, April 2014.
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