

Program at a Glance

July 16, Monday				
12:00-21:00 Registration (Entrance Hall, BICC)				
18:00-21:00 Reception Buffet (Lijiang Hall, 2nd Floor, BCG Hotel)				
July 17, Tuesday				
9:00-9:30 Opening Ceremony (Conference Hall No.3, Host: Prof. Huei Peng) Prof. Si Yuan, Vice President of Tsinghua University Prof. Keqiang Li, General Chair of AVEC 2018				
9:30-10:30 Keynote Speech (Conference Hall No.3, Chair: Prof. Huei Peng) Smart Cities, Smart Transport, Smart Vehicles (SCSTSV) in China: Development Strategies, System Architecture and Market Application Dr. Jun Li				
10:30-11:00 Coffee Break/AVEC Photo				
11:00-12:00 Keynote Speech (Conference Hall No.3, Chair: Prof. Huei Peng) Automated Driving R&D Program in Japan: SIP-adus Mr. Seigo Kuzumaki				
12:00-13:30 Lunch				
Room 305A	Room 305B	Room 305C	Room 305D	Room 305E
13:30-15:30 TuA1 Intelligent & Connected Vehicles I	13:30-15:30 TuB1 Collision Avoidance I	13:30-15:30 TuC1 Lateral Control I	13:30-15:30 TuD1 Longitudinal Control	10:00-12:00 TuE1 Chassis Control
15:30-16:00 Coffee Break				
16:00-18:00 TuA2 Intelligent & Connected Vehicles II	16:00-18:00 TuB2 Collision Avoidance II	16:00-18:00 TuC2 Lateral Control II	16:00-18:00 TuD2 Driver Modeling and Testing	16:00-18:00 TuE2 Special Session 1 Enhancing Vehicle Dynamics using Torque Vectoring
18:00-20:00 Welcome Reception (Lijiang Hall, Host: Prof. Keqiang Li)				
20:00-21:00 ISC Meeting/AVEC Board Meeting (Room 305E, Host: Prof. Keqiang Li)				
July 18, Wednesday				
8:30-9:30 Keynote Speech (Conference Hall No.3, Chair: Prof. Kevin Deng) Will Autonomous Driving be able to Fulfill the Driver's Requirements? Prof. Henning Wallentowitz				
9:30-10:00 Coffee Break				
Room 305A	Room 305B	Room 305C	Room 305D	Room 305E
10:00-12:00 WeA1 EV Motion Control	10:00-12:00 WeB1 Driver Behavior I	10:00-12:00 WeC1 Special Session 2 Control and Estimation on Intelligent Vehicles	10:00-12:00 WeD1 Vehicle Dynamics	10:00-12:00 WeE1 Energy Management

12:00-13:30 Lunch				
13:30-15:30 WeA2 Driver Assistance System I	13:30-15:30 WeB2 Driver Behavior II	13:30-15:30 WeC2 Special Session 3 I Control of Connected and Autonomous Vehicles for Energy Saving	13:30-15:30 WeD2 Tire Modeling and Estimation	13:30-15:30 WeE2 Vehicle Road Estimation
15:30-16:00 Coffee Break				
16:00-18:00 WeA3 Driver Assistance System II	16:00-18:00 WeB3 Autonomous Driving I	16:00-18:00 WeC3 Special Session 3 II Control of Connected and Autonomous Vehicles for Energy Saving	16:00-18:00 WeD3 Special Session 4 Recent Advances on Design and Control of Hybrid Electric Vehicle	16:00-18:00 WeE3 Special Session 5 Integrated and Cooperative Automated Vehicles
18:30-21:00 AVEC'18 Party (Chinese Royal Gastronomy Museum, Host: Prof. Masao Nagai) Announcement of the Host for AVEC 2020				
July 19, Thursday				
8:30-9:30 Keynote Speech (Conference Hall No.3, Chair: Prof. Shengbo Li) Towards the Introduction of Automated Driving: Current Challenges and Research Activities Dr. Adrian Zlocki				
9:30-10:00 Coffee Break				
Room 305A	Room 305B	Room 305C	Room 305D	Room 305E
10:00-12:00 ThA1 Vehicle System Control	10:00-12:00 ThB1 Autonomous Driving II	10:00-12:00 ThC1 Suspension Control I	10:00-12:00 ThD1 Special Session 6 Next Step of Integrated Motion Control and Highly Automated Driving for Future Intelligent Mobility	10:00-12:00 ThE1 Hybrid EV Control I
12:00-13:30 Lunch				
13:30-15:30 ThA2 Advanced Powertrain	13:30-15:30 ThB2 Autonomous Driving III	13:30-15:30 ThC2 Suspension Control II	13:30-15:30 ThD2 Testing Method and Evaluation	13:30-15:30 ThE2 Hybrid EV Control II
14:50-15:30 Coffee Break				
15:30-16:30 Closing Ceremony (Host: Prof. Yugong Luo) Prof. Keqiang Li, Overview of AVEC 2018 and Award Announcement				
July 20, Friday				
8:00-12:00 Technical Visits				

Timetable

July 17, Tuesday

9:00-9:30	Opening Ceremony (Conference Hall No.3, Host: Prof. Huei Peng) Prof. Si Yuan, Vice President of Tsinghua University Prof. Keqiang Li, General Chair of AVEC 2018				
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11:00-12:00	Keynote Speech (Conference Hall No.3, Chair: Prof. Huei Peng) Automated driving R&D program in Japan: SIP-adus Mr. Seigo Kuzumaki				
12:00-13:30	Lunch				
	Room 305A	Room 305B	Room 305C	Room 305D	Room 305E
	TuA1: Intelligent & Connected Vehicles I Chair: Gabor Orosz	TuB1: Collision Avoidance I Chair: Hideo Inoue	TuC1: Lateral Control I Chair: Frederic Kracht	TuD1: Longitudinal Control Chair: Francesco Braghin	TuE1: Chassis Control Chair: Tarsitano Davide
13:30-13:50	TuA1-1 Cooperative Lane Changing Strategies for Connected Automated Vehicles under Model Predictive Control Framework <i>Bai, Zhang, Hu</i>	TuB1-1 Predictive Vehicle Motion Control for Post-crash Scenarios <i>Nigicser, Turri, Mårtensson et al.</i>	TuC1-1 String-stable Lateral Control for Cooperative Driving <i>Hassanain, Alirezaei, Ploeg, et al.</i>	TuD1-1 Effects of Response Parameters and Longitudinal Driver Position on Handling Quality Evaluation <i>Tsukano, Sato, Kano, et al.</i>	TuE 1-1 Chassis Leveling Control with Parallel Active Link Suspension <i>Yu, Evangelou, Dini, et al.</i>
13:50-14:10	TuA1-2 Robustness of Connected Vehicle Systems <i>Hajdu, Insperger, Ge, et al.</i>	TuB1-2 Robust Automated Collision Avoidance using an Updating Particle Reference <i>Gordon, Gao, Yang, et al.</i>	TuC1-2 Development of an Adaptive Path Tracking Controller under Slippage Based on RBF Neural Network <i>Kang, Wu, Chen, et al.</i>	TuD1-2 Learning-Based Ecological Adaptive Cruise Control for Vehicles with Step-gear Transmissions <i>Li & Görge</i>	TuE 1-2 Hopf Bifurcation Analysis of the Lateral Dynamics of the Vehicle with Considering Body Roll <i>Guo, Wang, Lee</i>
14:10-14:30	TuA1-3 Modeling the Spreading of Malicious Information on a Connected Vehicle Platoon <i>Wang, Yu, Wu, et al.</i>	TuB1-3 Features of Car-to-bicycle Near-miss Incidents at Intersections <i>Takanashi, Murao</i>	TuC1-3 Game Based Cooperative Control of Steering and Driving Oriented Stability Systems <i>Zhao & Lu</i>	TuD1-3 The Estimation of Vehicle Speed based on Combined Method and Complementary Filter <i>Lu, Wang, Cao, et al.</i>	TuE 1-3 Development of Torque Sensor Fault tolerant control logic for EPS System <i>Lee, Sung, Han, et al.</i>

14:30-14:50	TuA1-4 A Strategy of Cooperative Lane Change for Automatic Vehicles Based on the Game Theory <i>Jiang, Hu, Wang, et al.</i>	TuB1-4 Design of Autonomous Emergency Steering using Multi-input Multi-output Model Predictive Control <i>Lin, Chen, Chan</i>	TuC1-4 Autonomous Drift Control using Vehicle Lateral Dynamics with Self-rotation and Revolution <i>Joa, Yi, Hyun</i>	TuD1-4 A Multi-mode Strategy of Adaptive Cruise Control Considering the Urban Traffic Environment <i>Zhu, Pei Chen, et al.</i>	TuE 1-4 Invariant Properties of Vehicle Suspension Model with Additional Spring and Inerter <i>Yang, Gobbi, Mastinu</i>
14:50-15:10	TuA1-5 Behavioral Cooperation of Multiple Connected Vehicles with Directed Acyclic Interactions using Feedforward-feedback Control <i>Bian, Zheng, Li, et al.</i>	TuB1-5 Speed Control for Automated Bus Considering Motion of a Vehicle in Opposite Lane at Intersection <i>Xiong, Yang, Kaizuka, et al.</i>	TuC1-5 A Feedback Linearization Technique for Vehicle Stability Control Based on a New Lateral Dynamic Model <i>Yang, Zhang, Feng</i>	TuD1-5 Distributed Control and Experimental Verification of Heterogeneous Intelligent Electric Vehicle Platoon <i>Liu, Zhuang, Yin, et al.</i>	TuE 1-5 Vehicle Yaw Stability Control Based on Robust Invariant Set <i>Echuan, Jian, Shuaikang, et al.</i>
15:10-15:30	TuA1-6 Evaluating the Effects of Topology Switching Period on the Dynamic Performance of Connected Vehicles based on Car-following model <i>Li, Zhao, Feng</i>	TuB1-6 Experimental Verification of Evasive Manoeuvre Assist Controller for Collision Mitigation with Oncoming Vehicles <i>Arikere, Yang, Klomp</i>	TuC1-6 Slip-angle Feedback Control for Autonomous Safety-critical Maneuvers At-the-limit of Friction <i>Fors, Olofsson, Nielsen</i>	TuD1-6 Eco-logical Cruise Control of In-Wheel Motor Electric Vehicle on Roads with a Varying Slope <i>Hu, Zhuang, Yin, et al.</i>	TuE 1-6 Method for Developing Tire Slip Controllers Regarding a New Cascaded Controller Structure <i>Zech, Eberl, Reichensdörfer, et al.</i>
15:30-16:00	Coffee Break				
	Room 305A	Room 305B	Room 305C	Room 305D	Room 305E
	TuA2: Intelligent & Connected Vehicles II Chair: Guodong Yin	TuB2: Collision Avoidance II Chair: Lingxi Li	TuC2: Lateral Control II Chair: Rui Xiong	TuD2: Driver Modeling and Testing Chair: Tetsunori Haraguchi	TuE2: Special Session 1 Enhancing vehicle dynamics using Torque vectoring Chair: Basilio Lenzo
16:00-16:20	TuA2-1 An Automotive Big Data Platform toward Control and Management Over the Cloud <i>Xu, Zhang, Tang, et al.</i>	TuB2-1 Control Strategy of Emergency Obstacle Avoidance Based on the Final Risk Probability <i>Zhang, Chen, Qu</i>	TuC2-1 Development of Motion Prediction based Yaw Moment Control for Vehicle Lateral Stability <i>Oh, Joa, Yi</i>	TuD2-1 Modeling Driver Warning Responses Time in Connected Vehicle Systems <i>Zhang & Wu</i>	TuE2-1 A Single Input Single Output Formulation for Yaw Rate and Sideslip Angle Control via Torque-vectoring <i>Lenzo, Sorniotti, Gruber</i>
16:20-16:40	TuA2-2 Hierarchical Reinforcement Learning for Decision Making of Self-driving Cars without Reliance on Labeled Driving Data <i>Duan, Li, Cheng, et al.</i>	TuB2-2 Collision-free CAV Navigation for Two Vehicles at Four-way Non-signalized Intersections <i>Xu & Brennan</i>	TuC2-2 Robust Automatic Steering with Inverse Optimal Control <i>Kitahara, Mukouya, Fukao, et al.</i>	TuD2-2 Driving Maneuvers Prediction via Infrared Camera and GPS <i>Jiang, Zhang, Chen, et al.</i>	TuE2-2 An Explicit Nonlinear MPC Approach to Vehicle Stability Control <i>Metzler, Tavernini, Sorniotti, et al.</i>

16:40-17:00	TuA2-3 Functional Architecture of 5G-based Driving Assistance for Autonomous Vehicles <i>Cheng, Ren, Xiao, et al.</i>	TuB2-3 Lane-deviation Penalty for Autonomous Avoidance Maneuvers <i>Anistratov, Olofsson, Nielsen</i>	TuC2-3 Performance Improvement of Automatic Steering Control by Sideslip Angle Estimation in High-speed Condition <i>Mukouya, Kitahara, Fukao, et al.</i>	TuD2-3 Driving Skill Learning Process Model and Application to Raising Skill Level <i>Togai, Ohno, Tamaki</i>	TuE2-3 On the Passive Limited Slip Differential for High Performance Vehicle Applications <i>Gadola, Chindamo, Lenzo</i>
17:00-17:20	TuA2-4 EPWS: An Edge-assisted Privacy-preserving Warning System for Intelligent Connected Vehicles <i>Ma, Qi, Zhu, et al.</i>	TuB2-4 Context-sensitive Hazard Anticipation Based on Driver Behavior Analysis and Cause-and-effect Chain Study <i>Saito, Raksincharoensak, Inoue, et al.</i>	TuC2-4 A Study of Setting up Optimized Steering Drive-line for Steering Vehicle Performance <i>Yong</i>	TuD2-4 Study on Construction of Feedback Control Algorithm in Driver Model using Risk Potential <i>Kobayashi, Kageyama, Tsubouchi, et al.</i>	TuE2-4 Advanced Driver Assistance Control for Drifting with Torque Vectoring <i>Vignati, Sabbioni, Cheli</i>
17:20-17:40	TuA2-5 Gated Recurrent Unit based Lane Change Prediction using Environmental Sensors and V2V Communication <i>Choi, Woo, Ahn, et al.</i>	TuB2-5 Effectiveness Assessment of Proactive Braking System for Intersection Collision Avoidance <i>Fujinami, Raksincharoensak, Sonka, et al.</i>	TuC2-5 A Controller for Automated Drifting Along Complex Trajectories <i>Goh, Goel, Gerdes</i>	TuD2-5 Driver State Analysis and Feature Extraction Based on Physiological Signals <i>Zhang, Liang, Sui, et al.</i>	TuE2-5 Technology of Advanced Driving Assistance: Realizing a New Society of Mobile Transport <i>Shao</i>
17:40-18:00		TuB2-6 Collision Avoidance Control System by using Virtual Repulsive Force Field Method <i>Raksincharoensak, Yokoyama, Yoshikawa</i>	TuC2-6 A Novel Trajectory Prediction of Traffic Participants for Autonomous Lane Change Assistance <i>Lee, Kwon, Kim, et al.</i>	TuD2-6 Analysis of High-skilled Drivers' Characteristic Driving Operations Based on Combined Features using AdaBoost <i>Wang, Li, Zhu, et al.</i>	TuE2-6 Bosch Vehicle Motion Control-key enabler for future Automated Driving functions <i>Tang</i>
18:00-20:00	Welcome Reception (Lijiang Hall, Host: Prof. Keqiang Li)				
20:00-21:00	ISC Meeting/AVEC Board Meeting (Room 305E, Host: Prof. Keqiang Li)				

July 18, Wednesday

8:30-9:30	Keynote Speech (Conference Hall No.3, Chair: Prof. Kevin Deng) Will Autonomous Driving be able to Fulfill the Driver's Requirements? Prof. Henning Wallentowitz				
9:30-10:00	Coffee Break				
	Room 305A	Room 305B	Room 305C	Room 305D	Room 305E
	WeA1: EV Motion Control Chair: Weichao Zhuang	WeB1: Driver Behavior I Chair: Bing Zhu	WeC1: Special Session 2 Control and Estimation on Intelligent Vehicles Chair: Changsun Ahn	WeD1: Vehicle Dynamics Chair: Mori, Yasuchika	WeE1: Energy Management Chair: John Yu
10:00-10:20	WeA1-1 On how to Transform a Commercial Electric Quadricycle into a full Autonomously Actuated Vehicle <i>Vignati, Tarsitano, Cheli</i>	WeB1-1 Feedback-based Safety Monitoring Strategy During Sudden Human Intervention for Longitudinal Motion Controller of the Driverless Vehicle <i>Hamid, Tukimat, Ravichandiran, et al.</i>	WeC1-1 Roll State Signal Processing and Estimation for Active Roll Control <i>Kim, Park, Huh</i>	WeD1-1 Comparative Analysis of Steering System Models in Model Predictive Control of Automated Vehicles <i>Thornton, Zhang, Varnhagen, et al.</i>	WeE1-1 Model-based Remaining Driving Range Prediction of Electric Vehicle Based on Route Information <i>Guo, Liu, Besselink, et al.</i>
10:20-10:40	WeA1-2 Design of Interface in Co-simulation for Electric Power Assisted Steering System Development <i>Chen, Ran, Jacobson</i>	WeB1-2 Does an Automated Steering Control Function Enhance Driver Safety Performance While Turning at an Intersection? <i>Saito, Uchida, Nagai, et al.</i>	WeC1-2 Vehicle Model for Longitudinal Road Profile Estimation <i>Gim & Ahn</i>	WeD1-2 Tire Modeling to Enable Model Predictive Control of Automated Vehicles from Standstill to the Limits of Handling <i>Zhang, Thornton, Gerdes</i>	WeE1-2 Load-following Threshold-changing Rule-based Strategy for Energy Management of Parallel Hybrid Electric Vehicles <i>Li, Evangelou</i>
10:40-11:00	WeA1-3 Stability Control of Electric Motor Driven Skid-steered Vehicles <i>Gao, Xiong, Meng, et al.</i>	WeB1-3 Multi-Behavioural Control Allocation for Over-actuated Vehicles <i>Kissai, Monsuez, Tapus, et al.</i>	WeC1-3 Accuracy Improvement of Vehicle Lateral Single-track Model <i>Cho, Na and You</i>	WeD1-3 Force and Friction Estimation based Braking Control Algorithm for Vehicles with Electric Motors <i>Vignati & Sabbioni</i>	WeE1-3 A Thermal Model for Photovoltaic Panels Installed on a Vehicle Body <i>Tiano & Rizzo</i>
11:00-11:20	WeA1-4 Torque Vectoring Control for Progressive Cornering Performance in AWD Electric Vehicles <i>Yang, Idegren, Jonasson</i>	WeB1-4 Analysis of Coupling Mechanism Between Driving Skill and Driving Style in Driver Personalization <i>Sun, Deng, Wu, et al.</i>	WeC1-4 A New Early Detection Concept for Tripped Rollover Considering Lateral Velocity <i>Na, Cho, Lee, et al</i>	WeD1-4 A Traction Control System based on Co-evolutionary Learning in Spiking Neural Network (SNN) <i>Pérez, Cabrera, Castillo</i>	WeE1-4 A Comparative Analysis of Electric Vehicle Real World Driving Cycles in Germany and China <i>Schüller & Schramm</i>

11:20-11:40	WeA1-5 Designs of Intelligent Bidirectional Charge and Discharge Pile and Its Controlling System <i>Zhou, Shen, Xu, et al.</i>	WeB1-5 Vehicle Guidance Control for Automated Driving considering Motion Sickness <i>Gallep & Müller</i>	WeC1-5 Fuel-conscious Cruising Controller for Stepped Gear Vehicle <i>Kim & Ahn</i>	WeD1-5 An IMC Controller Design for a Steer-by-wire Vehicle <i>Lin, Li, Cheng, et al.</i>	WeE1-5 MPILC Based energy management strategy for Series-parallel Plug-in Hybrid electric vehicle <i>Muhammad, Liu, Li</i>
11:40-12:00	WeA1-6 Autopilot Technology Advances and Apollo Ecology	WeB1-6 Steering-gain-based Identification of Driver Steering Characteristics by back Propagation Neural Network <i>Zhang, Zhang, Zong, et al.</i>	WeC1-6 Commercial Vehicle Intelligence and Connectivity Solutions for Different Application Scenarios <i>Ren</i>	WeD1-6 Rack Force Estimation of Electric Power Assist Steering System with Load-dependent Friction <i>Li, Shim, Wang, et al.</i>	WeE1-6 An Adaptive Transfer Learning Approach to Optimal and Personalized Battery System Management <i>Zhang & Shang</i>
12:00-13:30	Lunch				
	Room 305A	Room 305B	Room 305C	Room 305D	Room 305E
	WeA2: Driver Assistance System I Chair: Derong Yang	WeB2: Driver Behavior II Chair: Patrick Gruber	WeC2: Special Session 3 I Control of Connected and Autonomous Vehicles for Energy Saving Chair: Hosam Fathy	WeD2: Tire Modeling and Estimation Chair: Shaobo Lu	WeE2: Vehicle Road Estimation Chair: Eric Tseng
13:30-13:50	WeA2-1 Lateral Guidance Performance of the Controllers “Steer-by-angle” and “Steer-by-torque” in a Lane Keeping Assistance System <i>Stubler, Förster, Pfeffer, et al.</i>	WeB2-1 Classification of BEV Driving Data using Artificial Neural Networks with subsequent Driving Cycle Construction <i>Tewiele, Mirza, Blume, et al.</i>	WeC2-1 Fuel Efficient Connected Cruise Control for Heavy Duty Vehicles <i>He, Orosz, Ge</i>	WeD2-1 An Approach to Objectively Evaluate Tire Characteristics <i>Ronellenfitsch, Degenhart, Winge, et al.</i>	WeE2-1 Improving Lane Detection Performance based on Camera View Shifting and Geometric Post-processing <i>Wen, Yu, Yan, et al.</i>
13:50-14:10	WeA2-2 Robust Reference Path Generator Development for Vehicle-following <i>Talsma, Hellendoorn, Alirezaei</i>	WeB2-2 Driving Behavior Analysis in Situations where a Pedestrian Rushes Out from Behind a Parked Vehicle <i>Imanaga, Iwaki, Uchida</i>	WeC2-2 Fused Global-local Economic Model Predictive Control for Real-time Eco-optimal Control of a Heavy Duty Truck <i>Earnhardt, Borek, Groelke, et al.</i>	WeD2-2 Vehicle Shimmy Modeling with Steering System and Delayed Tyre Model <i>Mi, Stepan, Takacs, et al.</i>	WeE2-2 A Visual SLAM Method based on Vehicle Kinematics Model <i>Zhao, Guo, Gordon, et al.</i>

14:10-14:30	WeA2-3 Automated Steering Control of Parking Assist System for Articulated Vehicles <i>Hamaguchi & Raksincharoensak</i>	WeB2-3 Study on Driver's Steering Characteristics in Precision Docking by Shared Control using Driving Simulator <i>Sugimachi, Okada, Hayakawa, et al.</i>	WeC2-3 A Cascaded Multi-Rate Model Predictive Control and Reference Governor Approach for Real-time Velocity Optimization in the Presence of Traffic <i>Groelke, Earnhardt, Borek, et al.</i>	WeD2-3 Development of a Tire Temperature Model from Test Bench Measurements <i>Montrouge, Birouche, Basset, et al.</i>	WeE2-3 Region of Attraction of a Real-time Vehicle Pose Estimator using Monocular Vision and Lane Marker Maps <i>Leary & Brennan</i>
14:30-14:50	WeA2-4 Introduction of Driver and ADAS Control System Analysis and Synthesis Based on Controller Fusion Approach <i>Shimono & Tagawa</i>	WeB2-4 Upper Limb Parameter Identification Based on Least-squares Method and Driver's Neuromuscular Mechanics Characteristics <i>Zhang, Yang, Ji, et al.</i>	WeC2-4 Hardware-In-the-loop for Connected Automated Vehicles Testing in Real Traffic <i>Kim, Tay, Guanetti, et al.</i>	WeD2-4 Scaling Tire Models to Different Road Surfaces using an External IMU and K&C Measurements <i>Albinsson, Bruzelius, Ran</i>	WeE2-4 A Novel Intrusion Detection System Based on The Difference of Traffic Flow Density <i>Tian, Wang, Duan, et al.</i>
14:50-15:10	WeA2-5 Development and Validation of the Moderated Particle Reference Strategy with Driver in the Loop <i>Zhang, Gordon, Zong, et al.</i>	WeB2-5 Study on Driver's Preferred Lane-keeping Assistance System Intervention Timing Based on Subjective and Objective Correlation <i>Ran, Chen, Chen, et al.</i>	WeC2-5 Sequential Optimization of Velocity and Charge Depletion in a Plug-in Hybrid Electric Vehicle <i>Chen, Prakash, Stefanopoulou, et al.</i>	WeD2-5 Eco-routing based on a Data Driven Fuel Consumption Model <i>Huang & Peng</i>	WeE2-5 Pose Estimation for a Small Prototype Vehicle using Fisheye Camera <i>Valenti, Arrigoni, Braghin</i>
15:10-15:30	WeA2-6 Nonlinear Stability Prediction for Road Vehicles with Active Safety Systems <i>Tao Sun & Yuping He</i>	WeB2-6 A Driver's Braking Intention Identification Model Based on fNIRS <i>Zhu, Li, Li, et al.</i>	WeC2-6 FAW Series Gasoline Engines for "Hongqi" Executive Cars <i>Gong</i>	WeD2-6 Smart-Tire-based Tire Vertical Load Estimation And Enhanced Rollover Warning System <i>Wang, Liang, Wei</i>	WeE2-6 A Secure Video Context Sensing Scheme for Vehicular Cloud <i>Xiu, Wang, Zhu, et al.</i>
15:30-16:00	Coffee Break				
	Room 305A	Room 305B	Room 305C	Room 305D	Room 305E
	WeA3: Driver Assistance System II Chair: Schramm Dieter	WeB3: Autonomous Driving I Chair: Ning Zhang	WeC3: Special Session 3 II Control of Connected and Autonomous Vehicles for Energy Saving Chair: Hosam Fathy	WeD3: Special Session 4 Recent Advances on Design and Control of Hybrid Electric Vehicle Chair: Dongsuk Kum	WeE3: Special Session 5 Integrated and Cooperative Automated Vehicles Chair: Hui Zhang
16:00-16:20	WeA3-1 The Use of Multivariate Dynamic Time Warping to Determine the Most Influential Variables in ADAS Comfort Perception	WeB3-1 Practice And Future of Autonomous Driving <i>Rong</i>	WeC3-1 Pulse-and-glide Driving with Drivability Constraints: A Pontryagin Approach <i>Whitehair, Denlinger, Fathy</i>	WeD3-1 Complete Design Space Exploration of Generic Voltec Second Generation Powertrain via Virtual Levers <i>Song, Hwang, Barhoumi, et al.</i>	WeE3-1 Fault Detection and Isolation of Steering System Actuators for an Automated Vehicle <i>Hoogeboom, van der Sande, Nijmeijer</i>

	<i>Moser</i>				
16:20-16:40	WeA3-2 Adaptive MPC for Autonomous Lane Keeping <i>Bujarbaruah, Zhang, Borrelli</i>	WeB3-2 Motion-planning for Autonomous Driving based on Receding Horizon Approach and RRT Algorithm <i>Arrigoni, Roncadori, Braghin, et al.</i>	WeC3-2 Optimal Speed Planning using Limited Preview for Connected Vehicles with Diesel Engines <i>Huang, Salehi, Ersal, et al.</i>	WeD3-2 Optimal Hybrid Vehicle Control with Relaxed Speed Constraints <i>Pan, Xu, Peng</i>	WeE3-2 Motion Planning for Automated Connected Vehicles <i>van Hoek, Ploeg, Nijmeijer</i>
16:40-17:00	WeA3-3 Design of Panoramic Stereoscopic Vision Acquisition Platform for Intelligent Driving Assistant System <i>Zhu, Tang, Hu</i>	WeB3-3 Vehicle Independent Road Resistance Estimation using Connected Vehicle Data <i>Askerdal & Fredriksson</i>	WeC3-3 Reducing Road Vehicle Fuel Consumption by Exploiting Connectivity and Automation: A Literature Survey <i>Alvarez, Xu, Rodriguez, et al.</i>	WeD3-3 Fuel Saving Control for Hybrid Electric Vehicle Using Driving Cycles Prediction and Reinforcement Learning <i>Liu, Hu, Zou, et al.</i>	WeE3-3 EEA: the Critical Path for Next Generation Vehicle Development and Integration <i>Zhang</i>
17:00-17:20	WeA3-4 Intelligent and Connected Technologies and the Future of FAW Hongqi Passenger Car <i>Li</i>	WeB3-4 A Study on Steering Shared Control Combined with Velocity Control by Using Sequential Reference Curvature Generation <i>Inoue, Aikawa, Raksincharoensak</i>		WeD3-4 HEV Power Management Algorithm using Future Acceleration Predicted by DNN <i>Park & Ahn</i>	WeE3-4 Driver Intervention Detection in Automated Vehicles <i>van der Schinkel, Sande, Loof, et al.</i>
17:20-17:40		WeB3-5 Vehicle Motion Planning for Unconstructed Dynamic Environments with Motion Prediction for Moving Obstacles <i>Jeong, Kim, Jo, et al.</i>			WeE3-5 Functional Architecture and Safety for Autonomous and Cooperative Driving Vehicles <i>Dajsuren, Cleophas, Kochanthara, et al.</i>
17:40-18:00					
18:30-21:00	AVEC'18 Party (Chinese Royal Gastronomy Museum, Host: Prof. Masao Nagai) Announcement of the Host for AVEC 2020				

July 19, Thursday

8:30-9:30	Keynote Speech (Conference Hall No.3, Chair: Prof. Shengbo Li) Towards the Introduction of Automated Driving: Current Challenges and Research Activities Dr. Adrian Zlocki				
9:30-10:00	Coffee Break				
	Room 305A	Room 305B	Room 305C	Room 305D	Room 305E
	ThA1: Vehicle System Control Chair: Xuefang Li	ThB1: Autonomous Driving II Chair: Kaoru Kusaka	ThC1: Suspension Control I Chair: Bo Yang	ThD1 Special Session 6 Next Step of Integrated Motion Control and Highly Automated Driving for Future Intelligent Mobility Chair: Pongsathorn Raksincharoensak	ThE1: Hybrid EV Control I Chair: Shenhai Ran
10:00-10:20	ThA1-1 Speed Control for Robust Path-tracking for Automated Vehicles at the Tire-road Friction Limit <i>Laurense & Gerdes</i>	ThB 1-1 Developing an Operational Testing Ground for Autonomous and Connected Vehicles <i>Wahba & Brennan</i>	ThC1-1 Design and Verification of Semi-active Suspension Based on Fuzzy Control and State Estimation <i>Guo, Wu, Sun</i>	ThD1-1 Evaluation and Verification for Intelligent and Connected Vehicle <i>Guo</i>	ThE1-1 Systematic Topology Optimization of a Plug-in Hybrid Electric Vehicle with Multiple Modes <i>Zhuang, Geng, Ju, et al.</i>
10:20-10:40	ThA1-2 LQR-based Optimal Steering Control for Intelligent Electric Drive Transport Vehicle <i>Wang, Lu, Jiang</i>	ThB 1-2 Data Association approach based on Improved Chaotic Ant Colony Algorithm in SLAM for Unmanned Ground Vehicle <i>Geng, Zhuang, Yin, et al.</i>	ThC1-2 Improvement of Ride Comfort Using Damping Control Based on Body Vertical Acceleration and Velocity <i>Choi, Kim, Sohn, et al.</i>	ThD1-2 A Study on Vehicle Steering Response to Improve Driver's Line Traceability <i>Tao</i>	ThE1-2 Model Reference Control during Mode Transition for a Single-motor Hybrid Electric Vehicle <i>Peng & Chen</i>
10:40-11:00	ThA1-3 Multi-objective Angle Control for Multi-axle Steering Vehicle <i>Chen, Guo, Du, et al.</i>	ThB 1-3 CAN-Bus Anomaly Detection in In-vehicle Network Based on Long Short-term Memory Learning <i>Chen, Zhu, Yao, et al.</i>	ThC1-3 Influence of Damping Characteristic on Body Sway of Car-trailer Combinations <i>Ma, Zhang, Yin, et al.</i>	ThD1-3 On the Road to Autonomous Driving in China <i>Pan</i>	ThE1-3 Particle Swarm Optimization for Optimal Powertrain parameters of parallel-series hybrid electric vehicles <i>Zhu, Ma, Li, et al.</i>

11:00-11:20	ThA1-4 Pavement Protection from Heavy-duty Trucks via Suspension and Braking Control at Signalized Intersections <i>Guo, Xiong, Yu, et al.</i>	ThB 1-4 Segmentation and Merging of Autonomous At-the-limit Maneuvers for Ground Vehicles <i>Anistratov, Olofsson, Nielsen</i>	ThC1-4 Real-time Calculation of Reaction Forces and Elasticities in Vehicle Wheel Suspensions <i>Kracht & Schramm</i>	ThD1-4 Decision-making and Motion Planning for a low-speed Autonomous Vehicle <i>Akagi</i>	ThE1-4 Trip-oriented Predictive Energy Management for a Plug-in Hybrid Electric Vehicle Based on Real-time Traffic Information <i>Liu, Chen, Lei, et al.</i>
11:20-11:40	ThA1-5 Comparison of Steering Feel Control Strategies in Electric Power Assisted Steering <i>Chugh, Bruzelius, Klomp, et al.</i>	ThB 1-5 Vision Based Predictive Control in High Curved Road <i>Suh & Borrelli</i>	ThC1-5 Improvement of Ride Smoothness during Damping Force Control by Bi-linear Optimal Control Applying Piston Speed Dependent Damping Coefficient Limitation <i>Hirao & Yamakado</i>	ThD1-5 Automated Driving as a Key Technology for Future Mobility Concepts <i>You</i>	ThE1-5 Implementation of a velocity optimization strategy to trade off transport time and fuel efficiency for hybrid mining trucks <i>Yang, Yang, Hai, et al.</i>
11:40-12:00	ThA1-6 Multiple Vehicle Tracking Based on Multiple Model PHD Filter using a Laser Range Finder <i>Dai, Wang, Chen, et al.</i>	ThB 1-6 Unified Path Planning and Control for Autonomous Vehicles using Artificial Potential Fields and Model Predictive Control <i>Snapper, Hellendoorn, Kazerooni, et al.</i>	ThC1-6 Front Suspension Analysis to Shorten the Vehicle Response Time <i>Hayashi</i>	ThD1-6 Automated Driving: From Highway to Downtown <i>Henze</i>	ThE1-6 Design of Power Management Strategy Using Artificial Neural Networks for Mild Hybrid Electric Vehicles <i>Guan & Chen</i>
12:00-13:30	Lunch				
	Room 305A	Room 305B	Room 305C	Room 305D	Room 305E
	ThA2: Advanced Powertrain Chair: Yonggang Xu	ThB2: Autonomous Driving III Chair: Jinghong Yu	ThC2: Suspension Control II Chair: Qing Xu	ThD2: Testing Method and Evaluation Chair: Zexing Zhang	ThE2: Hybrid EV Control II Chair: Qi Sun
13:30-13:50	ThA2-1 Front Loading the Calibration of Hybrid Operation Strategy via a Virtual Model Based Approach <i>Ravi, Koegeler, Jones, et al.</i>	ThB2-1 Optimized Selection and Deployment of Environment Perception Sensors for Advanced Driver Assistance Systems <i>Xie, Luo, Li, et al.</i>	ThC2-1 Control Analysis for Enhancing Ride Comfort through Linear Quadratic Regulator <i>Munawwarah, Yakub, Rasid, et al.</i>	ThD2-1 Development of a New Test Center for the Evaluation of Safety Related Performance of Automated Vehicles in Japan <i>Kitajima, Takayama, Uchida, et al.</i>	ThE2-1 Collaborative Optimization of Topology and Size for Three Planetary Gear Hybrid Powertrains <i>Qin, Luo, Li, et al.</i>
13:50-14:10	ThA2-2 Method of SOC Balancing Control for HEV <i>Koo, Kim, Kim, et al.</i>	ThB2-2 Eco-driving with Learning Model Predictive Control <i>Kim, Tay, Guanetti, et al.</i>	ThC2-2 Roll Center Position and Active control of Rear Suspension Geometry <i>Ruiz, Alirand, Cheli, et al.</i>	ThD2-2 Extraction of V2V Encountering Scenarios from Naturalistic Driving Database <i>Mo, Li, Yang, et al.</i>	ThE2-2 48V Hybrid Powertrain Optimal Policy/Tool for automatic hybrid powertrain calibration

					<i>Barbé & Ge</i>
14:10-14:30	ThA2-3 Optimal Dual Synchronization Control of Rotational Speed and Angle in Non-synchronizer Automatic Mechanical Transmission <i>Lu, Chen, Wang, et al.</i>	ThB2-3 Safeguard Protected Preview Lane Keeping Control for Automated Vehicles <i>Xu & Peng</i>	ThC2-3 Equivalent Suspension Parameters of Active Suspension Systems <i>Klinger, Edelmann, Jeindl, et al.</i>	ThD2-3 Effects of Vehicle Body Motion on Handling Quality Evaluation during Lane Change with G-vectoring Control <i>Kiko, Tanaka, Suzuki, et al.</i>	ThE2-3 Comparative Study of Hybrid Powertrain Architectures from a Fuel Economy Perspective <i>Chen, Li, Evangelou</i>
14:30-14:50		ThB2-4 Parking Space Detection of Automatic Parking System Based on Panoramic View <i>Huang, Li, Luo, et al.</i>		ThD2-4 A comprehensive Simulation Platform for Testing Autonomous Vehicles <i>Choudhury, Kulandaivelu, Aparow, et al.</i>	
14:50-15:30	Coffee Break				
15:30-16:30	Closing Ceremony (Host: Prof. Yugong Luo) Overview of AVEC 2018 and Award Announcement Prof. Keqiang Li				

July 20, Friday

8:00-12:00	Technical Visits
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