



第二届智慧城市背景下交通信息工程及控制学科发展论坛
8:00 AM - 12:30 PM, 2017年7月8日, COTA 国际交通科技年会

未来智慧城市是将新一代信息技术充分运用在城市的各行各业之中、基于知识社会下一代创新的城市信息化高级形态。新一代信息技术、物联网、大数据、云计算等技术的广泛应用,促进了信息时代的城市形态向智慧城市建设转变。智慧城市发展的理念强调知识创新作为城市发展的动力,尤其是信息和通信技术对城市经济和社会文化的智慧化影响、以及信息技术对城市功能的作用。信息技术和互联网发展带动了“数字城市”、“信息城市”等城市组织形式的出现,尤其新型的网联车、自动驾驶研究和网约车与共享单车的成功普及,进一步推动智慧交通信息与控制技术的变革和进步。在智慧城市转化的过程中,交通信息工程及控制学科也必然迎来新的发展机遇、面临如何使技术和知识创新与教育革新同步一体化的新挑战。为更好地推动智慧城市背景下交通信息工程与控制学科的新发展,在海内外有识之士的共同倡导与努力下,我们于2016年COTA国际交通科技年会期间成功地举办了第一次学科发展论坛,并初步建立该科学与技术发展论坛机制,充分利用海外华人协会与国内高校联合举办的国际科技年会(即COTA International Conference of Transportation Professionals - CICTP)的机会举办该系列论坛,旨在未来数年来通过参加论坛的专家、学者以及政府与工业界有识之士的广泛交流,推动交通信息工程与控制学科的壮大发展,为促进培育具有适应智慧城市发展需求的创新型人才共策良计。

Forum Steering and Advisory Committee:

Jizhen Guan (Chair), Yunpeng Wang (Co-Chair), Yinhai Wang, Hongzhi Guan, Xiangmo Zhao, Zhi Yu, Dianhai Wang, Xiaoguang Yang, Hai Yang, Xiping Yan, Yi Zhang, Wei Wang, Chunfu Shao, and Jifu Guo.

Forum Organizing Committee:

Heng Wei (Chair), Guohui Zhang, Wanjing Ma, Xiaofeng Chen, Zhijun Qiu, and Haizhong Wang

Sponsors:

- COTA Technical Committee (TA-TC01): Traffic Operations and Intelligent Transportation Systems
- IEEE Intelligent Transportation Systems Society Technical Committee on Traffic and Travel Management
- ASCE's Transportation & Development Institute (T&DI) Advanced Technology Committee
- ASCE's Transportation & Development Institute (T&DI) CAV Impacts Committee
- Transportation Research Board Committee on User Information Systems (AND20)

**2nd Smart City-Driven Traffic Information Engineering and Control Discipline
Development Forum**

8:00 – 12:30

JiRen Building312

Organizing Committee Chair: Dr. Heng Wei, Professor, University of Cincinnati, USA

济人楼 312

Opening Remarks

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| Moderator | <i>Dr. Yin Hai Wang, Forum Steering and Advisory Committee Member; Professor, University of Washington, USA.</i> |
| 8:05 – 8:10 | <i>Dr. Heng Wei, Forum Organizing Committee Chair; Professor, University of Cincinnati, USA.</i> |
| 8:10 – 8:15 | <i>Dr. Jizhen Guan, Forum Steering and Advisory Committee Chair; Chairman of the Board, Beijing Stone ITS Integration Co., Ltd., China.</i> |

Invited Presentation: State-of-the-Art Transportation Technology Innovations

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| Moderator | <i>Dr. Chunfu Shao, Forum Steering and Advisory Committee; Professor, Beijing Jiaotong University, China.</i> |
| 8:20 – 8:40 | Data-driven Traffic Signal Control <i>Dr. Yunpeng Wang, Forum Steering and Advisory Committee Co-Chair; Vice President, Beijing University of Aeronautics and Astronautics, China.</i> |
| 8:40 – 9:00 | Progress of Connected Vehicle Research and Testing Technology <i>Dr. Xiangmo Zhao, Forum Steering and Advisory Committee Member; Vice President, Chang'an University, China.</i> |

Invited Presentation: Smart Transportation Data and Information

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| Moderator | <i>Dr. Wei Wang, Forum Steering and Advisory Committee Member; Professor, University of Southeast University, China.</i> |
| 9:05 – 9:25 | OpenITS Data Development and Application Mechanisms <i>Dr. Zhi Yu, Forum Steering and Advisory Committee Member; Professor, Sun Yat-sen University, China</i> |
| 9:25 – 9:45 | Creative Development of Internet Big Data and Smart Transportation <i>Mr. Zhenning Dong, Vice President, Alibaba-AutoNavi Software Co., Ltd., China</i> |
| 9:45 – 10:00 | Tea/Coffee Break |

Invited Presentation: Highlight of Practical Problems

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| Moderator | <i>Dr. Hai Yang, Forum Steering and Advisory Committee Member; Professor, Hong Kong University of Science and Technology, China.</i> |
| 10:05 – 10:25 | Emerging Challenges and New Development of ITS <i>Dr. Jizhen Guan, Forum Steering and Advisory Committee Chair; Chairman of the Board, Beijing Stone ITS Integration Co., Ltd., China.</i> |
| 10:25 – 10:45 | Traffic System Health Analysis and Intelligent Diagnosis - The New Direction of Traffic Information and Control Discipline Development <i>Dr. Xiaoguang Yang, Forum Steering and Advisory Committee Member; Professor, Tongji University, China.</i> |

| Panel Discussion | |
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| Moderator | <i>Drs. Yi Zhang (Professor, Tsinghua University), Xinping Yan (Professor, Wuhan University of Technology), Steering and Advisory Committee Members.</i> |
| 10:50 –12:10 | <p>Participants: Domestic and international experts and scholars, department heads, chairmen, and leaders from the relevant research institutes and universities</p> <p>Discussion Topics:</p> <ol style="list-style-type: none"> 1. Connected vehicle-based information sharing and control coordination: technology innovation and education integration 2. Big data initiative-driven traffic information sharing and knowledge extraction: the strength and weakness of the existing traffic information engineering and control discipline to lead this effort 3. The opportunities and challenges of traffic information engineering and control discipline growth under smart city initiatives: <ul style="list-style-type: none"> • Opportunities and collaborations for National Science Foundation China (NSFC) application • Enhanced scholarship and achievement recognition by the top journals 4. In-depth control discipline collaboration, resources sharing, and education enhancement |
| Closing Remarks | |
| 12:10 – 12:20 | <i>Dr. Yu Zhang, President of COTA; Associate Professor, University of South Florida, USA.</i> |
| 12:20 –12:30 | <i>Dr. Yinhai Wang, Forum Advocate and Steering and Advisory Committee Member; Professor, University of Washington, USA.</i> |