

hundreds of hours of work to provide a top-quality event. An important part of these efforts was focused on endowing the conference with a more international impact by means of satisfying certain standards from the IEEE, both in the

technical program and its organization and logistics. The registration and local arrangements were excellently coordinated by Angie Rueda, who also led a group of six student volunteers: Daniela Torres, Luis Eduardo Graterol, Bladimir

de la Espriella, Ray Villareal, Miguel Jiménez, and Carolina Martínez.

Carlos Ocampo-Martinez
Diego Patiño
Nicanor Quijano

The 36th Chinese Control Conference

The 36th Chinese Control Conference (CCC2017) was held on July 26–28, 2017, at the Dalian International Conference Center, Dalian, Liaoning Province, China. Dalian is one of the most attractive cities and a major metropolis in China. More than 2,500 people attended the conference including over 2,300 registrants, 50 faculty and staff volunteers, and more than 200 student volunteers from the Dalian University of Technology.

CCC2017 was sponsored by the Technical Committee on Control Theory (TCCT) of Chinese Association of Automation and Systems Engineering Society of China and locally organized by Dalian University of Technology, China. The conference was also cosponsored by several organizations, both domestic and abroad, including the Academy of Mathematics and Systems Science; CAS; China Society for Industrial and Applied Mathematics; Liaoning Association of Automation; Shenyang University of Chemical Technology; Liaoning University of Science and Technology; Asian Control Association; IEEE Control Systems Society (CSS); Institute of Control, Robotics, and Systems Korea;

and The Society of Instrument and Control Engineers, Japan. Many distinguished guests from these sponsoring and cosponsoring organizations attended the conference, along with more than 100 consultants and committee members of TCCT.

THE TECHNICAL PROGRAM

This year, 3,001 papers were submitted to the conference, with authors from 25 countries and regions. After a rigorous peer-review process organized by the conference program committee, 2,038 papers were accepted and featured in the proceedings, which have been included in the IEEE conference publication program with the IEEE catalog number CFP1740A.

Seven distinguished researchers delivered plenary lectures. The plenary lectures were

- » “Automatic Control—A Perspective” by Karl Johan Åström, Lund University, Sweden
- » “Smart Control System for Energy-Intensive Equipment” by Tianyou Chai, Northeastern University, China
- » “When Is a Time-Delay System Stable and Stabilizable? A Third-Eye View by an Amateur” by Jie Chen, City University of Hong Kong, China

- » “Advances in Distributed Control and Computation” by A. Stephen Morse, Yale University, United States
- » “Distributed Optimization and Learning” by Zong-Ben Xu, Xi’an Jiaotong University, China
- » “Biological Systems and Automatic Control: Some Results, Difficulties, Challenges, and Opportunities” by Denis Dochain, Catholic University of Louvain, Belgium
- » “The Common Myths of Control Systems Modeling” by Xiaohua Xia, University of Pretoria, South Africa.

These plenary sessions were chaired by Lei Guo, Wei Wang, Qianchuan Zhao, Lihua Xie, Ji-Feng Zhang, Tao Liu, and Yiguang Hong.

In addition to these speeches, there were 168 oral sessions, including 57 invited oral sessions arranged in 28 parallel tracks, and six poster sessions. A total of 995 oral paper presentations were given during CCC2017. The conference languages were Chinese and English. Papers in English sessions were presented in English, and papers in other sessions could be presented in either English or Chinese.



Dalian Xinghai Square, some parts of which were built using construction waste, is one of symbolic buildings in Dalian, the host city of CCC2017.

AWARDS

To recognize and honor scholars who made outstanding contributions to the field of systems and control science, to inspire and stimulate innovative and original research, and to develop systems and control science in China, the TCCT established the Chen Han-Fu Award in early 2014. At the opening ceremony of CCC2017, Lei Guo, chair of the Evaluation Committee of the Chen Han-Fu Award, announced the winner of the fourth Chen Han-Fu Award,

Xiren Cao, for significant contributions to fundamental theorems, computation methods, and practical applications in the analysis and optimization of discrete-event dynamic systems. Lihua Xie, a member of the evaluation committee of the Chen Han-Fu Award, introduced Cao's work, and Cao then gave an acceptance speech in which he expressed his appreciation to the evaluation committee.

At the closing ceremony, the following awards were presented: the

4th TCCT Outstanding Contribution Award, the 23rd Guan Zhao-Zhi Award, the 11th SCIS-CCC Poster Paper Award, the IEEE CSS Beijing Chapter Young Author Prize, and the Outstanding Volunteers Award. The winners of the Fourth TCCT Outstanding Contribution Award were Daizhan Cheng, Academy of Mathematics and Systems Science, CAS, China, and Wei Huo, Beihang University, China. The winning paper for the 23rd Guan Zhao-Zhi Award was



Tao Liu, Program Committee chair, presides over the opening ceremony of the conference.



Dongming Guo, president of Dalian University of Technology, addresses the opening ceremony.



Wei Wang, General chair, speaks at the opening ceremony of the conference.



(From left) Ji-Feng Zhang, chair of the Technical Committee on Control Theory, Chinese Association of Automation, presents the Guan Zhao-Zhi Award to Xiren Cao.



Karl Johan Åström delivers his plenary talk.



Tianyou Chai gives his plenary lecture.

"Simultaneous Social Cost Minimization and Nash Equilibrium Seeking in Non-Cooperative Games" by Maojiao Ye and Guoqiang Hu, with an honorable mention given for the paper "Distributed Optimization for Multi-agent Systems over General Strongly Connected Digraph" by Dong Wang, Zidong Wang, Dong Wang, and Wei Wang. Two papers received the 11th SCIS-CCC Poster Paper Award: "Visual SLAM Incorporating Wheel Odometer for Indoor Robots" by Jing Wang, Zongying Shi, and Yisheng Zhong and "Improved Reinforcement Learning for Cargo Ship Steering Control" by Ankit Sharma, Qing Zheng, and Mathew Noel. One paper received an honorable mention, "Enjoy Driving from Thought in a Virtual City" by Xin Pan, Zhijun Zhang, Yuanqing Li, Jun

Qu, and Chunhui Zhao. The winner of the IEEE CSS Beijing Chapter Young Author Prize was Jiahu Qin from the University of Science and Technology of China, for the paper "Output Group Consensus for Heterogeneous Linear Multi-Agent Systems Communicating over Switching Topology," coauthored by Qichao Ma and Weixing Zheng.

PANEL DISCUSSIONS

Jie Huang from the Chinese University of Hong Kong and Jie Chen from the Beijing Institute of Technology organized two plenary panel discussions at the conference. The session "Forum of Young Outstanding Scholars" included as panelists Qingshan Jia, Tsinghua University, China; Tengfei Liu, Northeastern University, China; Jun Zhao, Dalian University of Tech-

nology, China; and Yanlong Zhao, Academy of Mathematics and Systems Science, CAS, China. The other panel session "Intelligent Optimization of Process Industry" included panelists Weihua Gui, Central South University, China; Feng Qian, East China University of Science and Technology (the talk was given by Yang Tang from the East China University of Science and Technology); Chenghong Wang, National Natural Science Foundation of China; and Jinliang Ding, Northeastern University, China. They discussed the problems in the practice of intelligent optimization of the process industry and future development and prospects in this area.

Donghua Zhou from Shandong University of Science and Technology organized one discussion, "Automation



Jie Chen delivers his plenary talk.



A. Stephen Morse presents his plenary speech.



Zong-Ben Xu gives his plenary lecture.



Denis Dochain delivers his plenary lecture.



Xiaohua Xia gives his plenary talk.



Ji-Feng Zhang (left), chair of Technical Committee on Control Theory (TCCT), presents the TCCT Outstanding Contribution Award to Daizhan Cheng.



Lei Guo (left), chair of the Evaluation Committee for the Guan Zhao-Zhi Award, presents the award.



Hongxin Wu (left), chair of the Evaluation Committee for the SCIS-CCC Poster Award, presents the award.



Qingshan Jia (left), chair of IEEE CSS Beijing Chapter, presents the IEEE CSS Beijing Chapter Young Author Prize.



Andrew R. Teel gives the talk "Hybrid and Stochastic Hybrid Systems" at the preconference workshop.



At the preconference workshop, Biao Huang gives the lecture "Data Analytics for Control Systems Engineering."



Members of the Technical Committee on Control Theory after their meeting during CCC2017.

Engineering Education” at the conference, which included Ming Li from China University of Mining and Technology; Peng Yang from Hebei University of Technology, China; Chenghui Zhang from Shandong University, China; Haikun Wei from Southeast University, China; Ding Liu from Xi’an University of Technology, China; and Xiaozhong Liao from Beijing Institute of Technology, China, as speakers.

PRECONFERENCE WORKSHOPS

Two preconference workshops, organized by Shaoyuan Li, Shanghai Jiao Tong University, China, and Ximing Sun, Dalian University of Technology, China, were held at the Dalian International Conference Center. The workshop “Hybrid and Stochastic Hybrid Systems” included Andrew R. Teel from the University of California Santa Barbara, United States, as a speaker. The workshop “Data Analytics for Control Systems Engineering” included Biao Huang from the University of Alberta, Canada, as a speaker.

CONCLUDING REMARKS AND INVITATION TO CCC2018

Many individuals—authors, conference committee members, and general attendees—made many contributions to the success of the conference. The

program committee of approximately 400 members undertook the task of reviewing papers, compiling the final program, and editing the book of abstracts and the proceedings. Ten program regional chairs were responsible for promoting the conference within their respective regions and organizing invited sessions. The chairs are Tongwen Chen, University of Alberta, Canada; Junlong Chen, University of Macau, China; Xianchun Ding, University of Duisburg-Essen, Germany; Xiaoming Hu, KTH, Sweden; Qinglong Han, University of Griffith, Australia; James Lam, University of Hong Kong, China; Guoping Liu, University of South Wales, United Kingdom; Wei Ren, University of California, Riverside, United States; Xiaohua Xia, University of Pretoria, South Africa; and Tielong Shen, Sophia University, Japan. Moreover, the organizing committee successfully completed the daunting task of local arrangements. There were more than 50 faculty and staff volunteers and over 200 student volunteers in blue shirts serving throughout the conference. Their smiles and considerate service provided a pleasant experience for the attendees and helped the event run smoothly.

At the CCC2017 closing ceremony, Tao Liu, Program Committee chair,

gave a detailed summary of the conference. He also expressed sincere thanks to the units and individuals who contributed to the conference. Then Xin Chen, CCC2018 Program Committee chair and Organizing Committee chair, reported on the progress of the preparation work for CCC2018 and extended a warm invitation to colleagues to participate in the coming conference. CCC2018 will be held on July 25–27, 2018, in Wuhan, which is a prosperous and thriving metropolis. It serves as a key industrial, scientific, and educational base and one of the most important integrated transportation hubs of China. Unique natural scenery, millennial traditional culture, and modern civilization blend perfectly here. You can become infatuated with the scenic beauty and enjoy the delicious local food.

More information on CCC2018 is available on the conference website: <http://ccc2018.cug.edu.cn/English/Home.htm>. We look forward to seeing you in Wuhan next July!

Yanlong Zhao
General Secretary,
TCCT and CCC 2017

Ying Qu
Secretary, TCCT and
CCC 2017 Secretariat