



INSIDE THIS ISSUE

1

ZJUI Cross-Disciplinary Team Won A Gold Medal From Zhejiang College Students' 'Internet Plus' Innovation And Entrepreneurship Competition

2

Jianqing Pan, Chairman Of Tdg Group, Was Invited To The Class Of Engineering Orientation

3

ZJUI Signed A Cooperation Agreement With The Center For Balance Architecture Of Zhejiang University

4

2020 International Concrete Dragon Boat Competition

5

Professor Chen Wenchao Was Awarded The Grant From The Natural Science Foundation Of Zhejiang Province For Distinguished Young Scholars

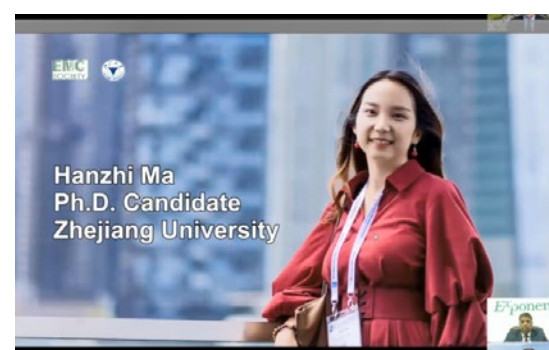
6

ZJU Virtual Lab For Computable Digital Transport Was Officially Launched

ZJUI PhD Candidate Hanzhi Ma Won The IEEE EMC Society President's Memorial Award

August 28, 2020

Article: MA Hanzhi



On August 27, 2020, ZJUI PhD candidate Hanzhi MA won the top international award for graduate students in the field of electromagnetic compatibility: IEEE EMC Society President's Memorial Award. The IEEE Electromagnetic Compatibility Society is the world's largest organization dedicated to the development and distribution of information, tools and techniques for reducing electromagnetic interference. The IEEE EMC Society President Memorial Award is awarded to outstanding graduate students worldwide, 1-2 per year, in recognition of their outstanding contributions in the field of electromagnetic compatibility, in order to commemorate the outstanding late President of the Society. This year the award was only awarded to one person. This is the first time that the award has been given to a graduate student from universities in mainland China.

Hanzhi MA is a PhD candidate of Zhejiang University and University of Illinois at Urbana-Champaign (UIUC) Joint PhD Program. Her supervisor is ZJUI Dean Professor Li Erping (IEEE Fellow), and her co-supervisor is UIUC Provost and Vice Chancellor Professor Andreas Cangellaris (IEEE Life Fellow). Her research interests include electromagnetic compatibility and signal integrity intelligent analysis algorithms, and signal integrity analysis and design of neuromorphic chips. During the first three years of pursuing her PhD degree, she published 9 papers in SCI journals and EI international conferences as the first author, and co-authored 8 papers. She has participated in international conferences in the United States, Singapore, and China, presenting seven lectures. In 2020 and 2017, she received IEEE Best Student Paper nomination in the field of signal integrity (Best SIPI Student Paper Shortlist, Top 5 and Top 10) at the EMC/SIPI conference. She served as a member of the IEEE NEMO 2020 technical committee and the chair of a session, the chair of a session of EMC COMPO 2019 and the reviewer of multiple international conferences. 🇺🇸

ZJUI 2020 Junior Faculty Teaching Competition Was Held

October 27, 2020

Article: CAI Tongjiang
Translator: HONG Zhouzhenyan
Photo: ZHANG Yi



In order to strengthen the faculty team and promote junior faculty members to update their teaching ideology, adopt modern teaching approaches and master basic teaching skills to improve outcomes of both traditional lectures and student training, the ZJUI Junior Faculty Teaching Competition was held in the Engineering Building B407 on the afternoon of October 20, 2020. Eleven junior faculty members from robotics, computer vision, systems engineering, remote sensing, image reconstruction and tomography, integrated circuits, structural engineering, intelligent transportation and other fields, participated in the competition. The competition is led by three main judges, Professor Tingju Zhu, Professor Weeliat Ong and Professor Fangwei Shao, who have extensive supervisory experience, outstanding teaching skills, and good reputations among students. Faculty members from various fields and representatives of the institute's Academic Affairs Office, participated in scoring. The event was hosted by Professor Fangwei Shao, an associate professor of ZJUI.

This competition is mainly composed of instructional design introduction, lecture display, and on-site questions, culminating in the comments and scoring by judges. The participating ZJUI junior faculty members were guided by the concept of cultivating students with virtue, combined with the characteristics of engineering. They carefully prepared the content of their lectures, demonstrated cross-disciplinary engineering teaching skills to everyone in the audience.

Associate Professor Hongwei Wang used persuasive questions and a humorous teaching style to show everyone the basic concepts and extensive applications of "Artificial Intelligence," focusing on constructing a rigorous knowledge network and learning framework through the simple example that is easy to understand.

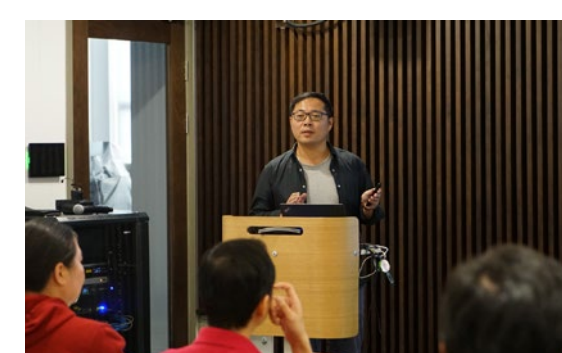
Assistant Professor Liangjing Yang introduced "Introduction to Robotics" by showing the projects of previous students, and briefly described the teaching content involved in theoretical and experimental courses. He clearly and logically introduced the latest information and cutting-edge development of robotics, such as robot vision and its applications through a large number of pictures and diagrams.

Assistant Professor Huan Hu's "Engineering Orientation" won applause for its remarkable practicality and extensiveness. This orientation course, which is only for freshmen, provides students with a wide engineering vision through cross-disciplinary projects combined with master seminars given by senior experts in academia and industry.

Assistant Professor Jiahuan Cui combined the characteristics of the "Statics" with multimedia through the electronic blackboard to create a positive lecture atmosphere. He also shared tips to help students master their course progress and improve learning efficiency.

After the demonstration, the judges gave instructive suggestions in terms of lecture design, content focus, delivery and posture, etc. It is hoped that junior faculty members will think more about how to emphasize inspiration, how to stress the most important aspects of the curriculum, and how to help students increase their understanding and interest in engineering courses. All of that will create an open and innovative atmosphere of learning, teaching and cross-field research.

After review, two faculty members Hongwei Wang and Liangjing Yang won the first prize of the competition for their scientific curriculum design as well as their innovative, interesting, focused and inspiring style. Huan Hu and other two faculty members, won the second prize. Jiahuan Cui and other 5 faculty members won the third prize. 🇺🇸



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Prof. Erping Li Delivered
A Keynote Speech On
SHAI2020 Conference

August 23, 2020

Article: ZHANG Yi
Resoure from the SHAI2020
conference



ZJUI Cross-Disciplinary
Team Won A Gold Medal
From Zhejiang College
Students' 'Internet
Plus' Innovation And
Entrepreneurship
Competition

August 26, 2020

Article: ZHANG Yi

From August 22 to 23, 2020, the 3rd Shanghai Artificial Intelligence Conference (SHAI2020) and the 3rd International Conference on Image, Video Processing and Artificial Intelligence (IVPAI 2020) was held in Shanghai. The conference invited the forefront experts and industry leaders in the field of artificial intelligence to give keynote speeches and share the latest research results. Professor Li Erping, the Dean of ZJUI, attended the meeting as an academic expert and gave a keynote speech entitled "Artificial intelligence spiking neuromorphic chip."

"The AI chip is the fundamental development of AI technology, but at this moment, the AI chip is still in its infancy stage," Prof. Li talked about the needs and challenges of the development of core electronic technology for information and communication, and the challenges of the AI chip design. He pointed out that the design has a long way to go before achieving general-purpose intelligence (Artificial General Intelligence, AGI). Taking the electromagnetic field as an example, the new SI/EMI challenges our minds when we design AI chips because the circuit architecture is based on the neural network of the human brain. He emphasized that the exploration of the AI chip is definitely strenuous and exciting, and requires greater efforts from scholars and researchers. His speech also covers the AI-IC electromagnetic integrity modeling, design, and analysis approaches.

After the speech, Prof. Li exchanged ideas with many entrepreneurs and scholars participating in the conference, exploring the possibility of in-depth cooperation with ZJUI.

It is reported that the many high-reputation academic guests attended this conference and shared the current industry implementation, including Prof. Xu Lei, the academician of the European Academy of Sciences, the Zhiyuan Chair Professor of Shanghai Jiaotong University, and the IEEE/IAPR Fellow; Prof. Guo Yike, the academician of the European Academy of Sciences, the Royal Academy of Engineering, and the tenured professor of Imperial College of Engineering; Prof. Mohamad Sawan, Canadian Academy of Engineering Academician, Professor of Montreal Institute of Technology, and IEEE Fellow. Well-known corporate guests include Mr. Lu Xiaoyuan, Chief Artificial Intelligence Officer of WeBank, Director of Shanghai Pudong Smart City Development Center; Mr. Lu Xiaoliang, Chief Scientist of Smart City Joint Laboratory of China Urban Science Research Association, Executive President of Xunfei Medical; and Mr. Du Yuqing, Senior Vice President of i Robot , Mr. Zhang Jiaying, Chief scientist of 360 Finance.

The conference was hosted by the Shanghai Advanced Research Institute, Chinese Academy of Sciences, co-sponsored by the Shanghai Institute of Artificial Intelligence, and organized by the Shanghai Urban Public Safety Research Center. More than 2,000 people attended the conference on-site, and tens of thousands of people attended the conference online. 

On August 24, the eight-member team of ZJUI undergraduates BAO Zichen, DONG Wenlan, LIU Zhuping, LI Jingshu, LIU Bowen, WANG Chenhao, CHANG Junyu, and SU Yipeng won a gold award from the 6th Zhejiang College Students' 'Internet Plus' Innovation and Entrepreneurship Competition. They are all from the class of 2022. Although the competition was only three days long, their efforts to perfect the smart green box project which helped them secure a gold award position have long been protracted. It is reported that a total of 207,908 college students from 128 colleges and universities across the province participated in the event, they put forward 28,528 projects and 148 of them won gold awards, and the gold award winning rate was only 0.52%.

The project proposed by the team focuses on a smart green box product, which aims to solve the pain points of single plants species of Dubai courtyard and high maintenance costs through the "green box" high-tech structure, assembled planting mode and smart irrigation system. They designed this product to reduce water consumption in the planting process while increasing the survival rate of plants, enriching the types of vegetation in arid areas, and reducing irrigation and maintenance costs. The team has also added intelligent irrigation services to the products, thus providing users with a simple and fun planting experience. This project has extensive market space in arid regions such as Dubai and the "One Belt One Road" countries. At present, the project team has obtained a number of patents, has reached a cooperation agreement with related parties in Dubai, and has established a model project in Dubai. At the same time, the team is in the process of actively promoting the Expo exhibition.

The eight members of the team come from civil and environmental engineering, mechanical engineering, computer engineering, electrical engineering, respectively. The team leader and the founder of this project, BAO Zichen, is responsible for team management, DONG Wenlan is responsible for product development and improvement, LIU Zhuping leads the marketing design part, LIU Bowen focuses on the publicity, and




(Continue from the last page) LI Jingshu, WANG Chenhao, CHANG Junyu and SU Yipeng developed intelligent system design.

When it comes to why choosing such a project, team leader BAO Zichen said that in addition to a coincidence, it also benefits from ZJUI's cross-disciplinary education. ZJUI provides cross-disciplinary teamwork experience, a broad international perspective, and also helps students to develop the ability of learning independently. Students of ZJUI are often concerned about global engineering challenges and are also interested in solving some common problems that troubled the international community. This kind of cross-disciplinary cooperation project is nothing new to ZJUI students. Everyone likes this kind of teamwork, which enables students to optimize the project by using each one's professional expertise, and at the same time, to explore and learn independently to solve the problem.

Professional courses such as engineering economics, mechanics-related courses, electronics-related courses, and computer programming-related courses provided by ZJUI play a very important role in project design and development. "Under ZJUI's unique international innovation training model, students' logical thinking ability, presentation ability, teamwork ability, independent exploration and research ability have all been improved in their daily study. These abilities helped a lot during the competition and enable us to deal with challenges more calmly." Bao Zichen said.

"I would also like to thank our four instructors, Prof. K.C. TING, Prof. LI Binbin, Prof. LI Chushan and Prof. Weeliat Ong for their careful guidance on business model design, intelligent irrigation system development and presentation materials preparation." The success of the team also benefited from the efforts of the four instructors of ZJUI. As one of the instructors, Professor K.C. TING, Vice Dean of the International Campus of Zhejiang University College and an internationally renowned agricultural engineering expert, mentioned that, the proposal is well-written, and shows the team's clear understanding of the business, geographical market(s), plants' role in urban landscape design, knowledge of horticulture, conservation of environmental resources (water in this case), and engineering methods for problem solving. The business plan is based on real case opportunities and presents a comparative advantage. "I have been very impressed by their diligence in thorough research, science-based analysis, and logical presentation. They have taken the work with high interest and very seriously. They have been approaching me with excellent ideas and documents. All I need to do has been to serve as a critical reviewer of their work and challenge them with some stretched ideas. They have always been very responsive to my suggestions and comments. I have actually learned quite a bit from their project. The team and the project are a good example of how our International Campus enables its members to learn and succeed globally." Prof. Ting said.

Another instructor, ZJUI Associate Professor Weeliat Ong also believes that the team's plans and ideas are relatively mature and useful. Especially in the current situation of global epidemic, this product can effectively reduce labor, and can also lower the threshold for planting vegetables, so that everyone can grow vegetables by themselves and reduce going out. In addition, the product is also suitable for indoor environments, and in addition to producing food, it can also beautify the home.

As Prof. K.C. Ting said, the team and the project fully demonstrated the value of ZJUI's international innovation education model and the concept of "to learn and succeed globally" of the international campus. Students will continue to exercise their skills, pioneer and innovate in their study and life, continue to apply what they have learned to their lives, and continue to meet global engineering challenges as their responsibility. 



ZJUI Plenary Meeting Was Held

September 9, 2020

Article: ZHANG Yi


Translator: JIN Xiufang

Photo: ZHANG Yi



On September 9th, ZJUI plenary meeting was held in the Engineering Building. The meeting mainly conveyed and learned the spirit of the mid-year meeting of ZJU and the campus studied the next five-year plan of ZJUI, and deployed the educating work of the fall semester of 2020.

Prof. LI Erping, Dean of ZJUI, described the construction and development plan of ZJU and the campus in the next five years, and reported on the development of ZJUI in the next five years. Prof. Li pointed out great changes deserve great actions, new beginnings require new drivers. In the past four years, ZJUI has made leap-forward development from scratch. In the next step, we should pay attention to the theme of 'integration and innovation' of today, international feature of 'educating globally,' ZJU characteristics of 'double first-class initiative,' and further deepen innovative educational models, fully develop the advantages of cross-disciplines, improve the system of faculty recruitment and development, strengthen the sustainability of international cooperation, enhance the ability to respond to global changes, and improve the governance capacity. He emphasized that it is necessary to seize the opportunity of the construction of "interdisciplinary programs initiative" by the China government, promote the frontier scientific research in interdisciplinary engineering field, and strive to become the most influential international engineering education provider in China.

All faculty and staff attended the meeting and held extensive discussions on the development of teaching and scientific research, discipline construction, and faculty recruitment and promotion etc. 

Jianqing Pan, Chairman Of TDG Group, Was Invited To The Class Of Engineering Orientation

October 20, 2020

Translator: WU Di

Article: LI Zhuohao

Photo: CHEN Yihui



In order to arouse students' enthusiasm for innovation and enhance students' sense of social responsibility, on October 19, ZJUI invited Mr. PAN Jianqing, chairman of TDG group, to deliver the theme lecture concerning enterprise's innovation and the responsibility in the class of Engineering Orientation. More than two hundred students attended and listened to Mr. Pan's experience and insight.

Based on his own entrepreneurial experience and the establishment and development of TDG, Mr. Pan talked about the significance of innovation and technology when China is experiencing profound shifts unseen in a century, and encouraged students to seize the opportunity to make a difference in the new era.

Mr. Pan described his experience of starting his own business from scratch. In the early stage of his business, the conditions were difficult and he was poor. Following his father's inspiration his original goal was to solve the problem of food and clothing. After 30 years of development, TDG has become a leader in many fields. He stressed that the ability to endure hardship and cultivate determination are the key factors in establishing a business. He also encouraged students to cultivate the character of being unafraid of difficulties and challenges, which is needed in any time.

With the importance of innovation gene to technology and enterprise development underlined, Mr. Pan pointed out that TDG always adhered to technological innovation, attached great significance to technological development and kept pace with the time since its establishment. TDG is the National Enterprise Technology Center, provincial key laboratory of New Information Materials Technology research, and Zhejiang provincial research center of New Magneto-electric and Photoelectric Information Materials. In 2001, it became the first listed company controlled by natural person in China. In the past 23 years, it has been continuously awarded top 100 electronic component enterprises and top 50 electronic material enterprises. What's more, TDG group established Tiantong Research Institute to cultivate innovation team and expert team, insisted on innovation in the expansion of industrial fields, and finally attained today's brilliant achievements. "Today's environment is more suitable for starting a business than in the 1990s. The era gives us chances and development opportunities, and anyone can make a difference somewhere in the era's big stage." Mr. Pan said. In his opinion, this is an age of speed when we should compete with speed, and the factor forming speed is a technological innovation, which determines whether enterprises will survive for a long time. At the same time, he advised students to be grateful for this era and this powerful country.

Mr. Pan concluded that the development of enterprises needs technological innovation, technological innovation needs experts, and the cultivation of experts needs education, which is the essence of a university. His lecture, full of experience and passion, deepened students' understanding of the significance of learning engineering knowledge, stimulated students' enthusiasm for innovation and business, and triggered students' thinking about future career development.



ZJUI Signed A Cooperation Agreement With The Center For Balance Architecture Of Zhejiang University

September 17, 2020

Article: MO Chenyi




ZJUI CEE Undergraduate Teams Won The Outstanding Undergraduate Presentation Award

September 16, 2020

Article | James Qi


Photo | Provided by the students

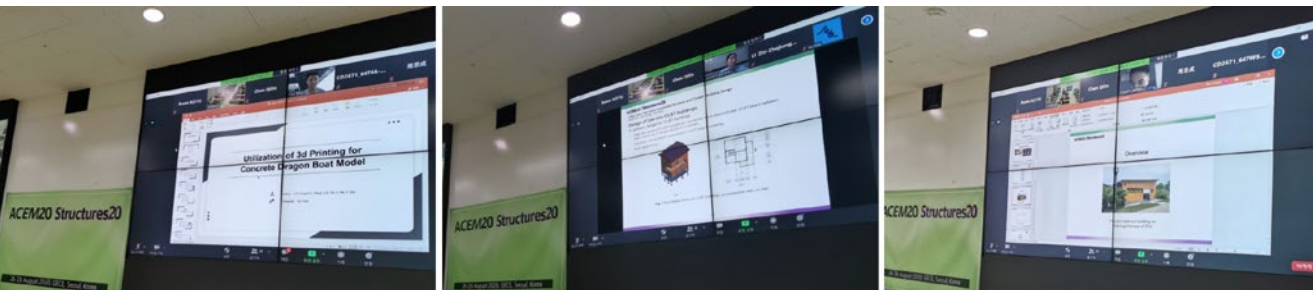


In ZJUI, Engineering Orientation is a course specially designed for freshmen. Senior scholars and industry elites from home and abroad bring wonderful seminars in the field of engineering to students and lead them to conduct interdisciplinary team design projects. Before, many experts and scholars, such as Chen Liming, chairman of IBM Greater China, Prof. Luke P. Lee, vice president of The National University of Singapore, Dr. Tan Don, IEEE fellow and former chairman of IEEE Power Electronics Branch, have all brought rich and thought-provoking lectures to ZJUI students. These seminars at Engineering Orientation broadens student horizons, inspires their thinking, cultivates their interdisciplinary thinking and ability, and enables them to understand and master the future requirements of engineering discipline. 

On the morning of September 14, a cooperation signing ceremony was held between ZJUI and Center for Balance Architecture (BAC) of Zhejiang University in Xixi Campus. Prof. MA Hao, ZJUI Vice Dean, and DONG Danshen, Director of BAC attended the signing ceremony on behalf of both sides.


The concept of "balance" advocated by BAC fits well with ZJUI Center for Research on Sustainable Systems (CROSS) and Center for Infrastructure Resilience in Cities as Livable Environments (CIRCLE), which laid a good foundation for the cooperation between the two side. With the strong support of ZJUI leadership, and with the active communication and efforts of Prof. XIAO Yan and Prof. LI Binbin, the cooperation has been smoothly and orderly promoted.

According to the cooperation agreement, the both sides will carry out key research on the balance architecture theory, the future community, green architecture, circular city, etc, and seek shared development strategies, jointly cultivate outstanding students, provide an interactive platform for high-level scholars and professionals, and innovate the international cooperation and share a vibrant environment. This cooperation indicates that the two sides stand at a new starting point and step into a new stage of cooperation in the future. With the goal of making outstanding achievements in major scientific research programs and international platform construction, the two sides will work together for win-win cooperation and make efforts to improve scientific innovation capacity and international competitiveness. 



Recently, the 2020 World Congress on Advances in Civil, Environmental, and Materials Research (ACEM20)/The 2020 Structures Congress (Structures20) was held at Seoul National University, South Korea. Three papers authored by junior undergraduates of Civil Engineering of ZJUI were accepted by the conference. These undergraduates came from three Student Research Training Project (SRTP) teams under the guidance of Prof. XIAO Yan, including "Low Rise Cross Laminated Bamboo and Timber Building Design," "Design and Construction of a Bamboo structure waste Treatment," and "Utilization of 3D Printing for Concrete Dragon Boat Model" teams. The team representatives DONG Siyi, PAN Hongyi, and FENG Yiqi gave presentations at the conference online and shared their research results. These three groups of students were awarded the ACEM20/Structures20 Outstanding Undergraduate Presentation Awards for their excellent presentations and innovative research results.

The Congress has been held for 11 years, and it aims at providing the first step fusion approach to solving the global problems of infrastructure, new materials, and environmental issues. It became a premier international forum that brings together academics and practicing engineers to exchange the frontier research results in the allied technologies under the topics of infrastructure, environmental, and materials research.

ZJUI students' excellent English proficiency, astute speech defense skills, and persistent pursuit of scientific research are constantly displayed and confirmed on international academic stages. 

2020 International Concrete Dragon Boat Competition

October 19, 2020

Article: Quoted from ZJU wechat article, "The Second International Concrete Dragon Boat Competition"

Translator: WANG Yiyi



On October 17, ZJUI successfully hosted the 2020 International Concrete Dragon Boat Competition on the International Campus, Zhejiang University. Thirty teams, including the University of Illinois at Urbana-Champaign (UIUC), Zhejiang University, Central South University, South University of Science and Technology, Dalian University of Technology, Southwest Jiaotong University, Kongu Engineering College, gathered on campus for the event. They demonstrated the creativity and splendor of the integration of modern concrete technology and Chinese traditional culture. Wang Yufen, Deputy Secretary of Party Committee and Secretary of Commission for Discipline Inspection Committee of International Campus, ZJU, and other representatives of ZJUI faculty, attended the event.

The competition process is mainly divided into four parts, namely, hull index test, appearance display, drag racing and review including steeplechase, presentation, technical paper, etc. Due to the need of epidemic prevention and control, the invitational competition adopts the form of webcast to provide online channels for other university teams to watch and review the competition. Dragon-boats that participate in the linear speed racing will be mailed to the organizing committee in advance, under the unified control of the competition operator. Steeplechase and Project presentations will be recorded by the participating teams for review.

The competition combined professionalism, culture, entertainment, collaboration, innovation. The goals were to promote Chinese traditional culture, domestic and foreign exchange, reflecting the progress of concrete scientific research and construction technology at home and abroad. These projects also improve comprehensive abilities of undergraduates including material and structure design, analysis and calculation and practical operation, art design, application of automatic control and interdisciplinary collaboration, etc.

Although this year's competition has been postponed, the enthusiasm for participating in the competition of university teams at home and abroad kept growing. "There were still a lot of universities that wanted to join. At the beginning, 59 teams signed up. Moreover, the enthusiasm of students on campus has been improved and more works are interdisciplinary." Prof. Xiao Yan, director of the organizing committee of 2020 International Concrete Dragon Boat Competition said.

It is known that the participating dragon boats must be made of cement-based curing materials, concrete and foam formwork lightweight sandstone, among which the volume ration of concrete materials in the hull shall not be less than 50%. There is also the need to install engines and remote-sensing receivers on the boat, and remote control operators command the boat's navigation by remote control. "This year's teams are actively trying new technologies," Kong You Bohong, one of Prof. Xiao's master students, introduced. "Most of the boats' hulls and skeletons use 3D printing technology and biomass fiber technology. In the previous on-campus competition, two other groups of students tried Wi-Fi remote module control, but they sadly, failed due to the immature technology."

Because of the different design parameters, the performance of each dragon boat is also different in the drag racing competition. Some pranced and rode away, in response to the roar of the crowd, but they hit the floating ball on the edge halfway down the course and started spinning around constantly. Still others, though far behind at first, made steady progress, reaching the opposite bank first. Steeplechase, presentation, technical paper and other review sessions were carried out through the combination of online and offline methods. The judges rated the pre-recorded steeplechase videos, presentation videos, technical papers and the hull index data measured in advance according to a certain weight.

There are 14 third prizes, 8 second prizes, 3 first prizes and 2 grand prizes, as well as 9 individual awards including Technical Challenge Award, Best Appearance Design Award, International Friendship Award, etc. The teams that won the grand prizes are from Southwest Jiaotong University and Zhejiang University.

"The student-oriented competition should be fun and entertaining, and of course the dragon boat competition is also artistic. To my delight, the students are really enthusiastic and enjoy the process. Of course, the students, including instructors, also put a lot of effort into trial and error. Hopefully, in this process, students will look at technology in a primitive way, and their imagination and creativity are further stimulated." Prof. Xiao Yan said, "I hope more technologies will be added next year, such as new energy and AI. We are also looking forward to letting the concrete dragon boats 'fly' and making concrete 'spaceships'." As for the longer-term future, Prof. Xiao Yan also put forward the goal of building an international event with the cultural background of China.

The competition was guided by Chinese Society for Engineering Education (CSEE) and Civil Engineering Education Committee. It was co-sponsored by Zhejiang University – University of Illinois at Urbana-Champaign Institute and Youth League Committee of International Campus, ZJU, and co-organized by American Concrete Institute (ACI).

Professor Chen Wenchao Was Awarded The Grant From The Natural Science Foundation Of Zhejiang Province For Distinguished Young Scholars

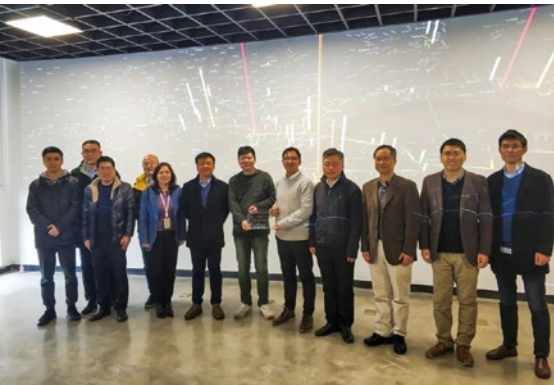
November 20, 2020

Article: CHEN Wenchao

ZJU Virtual Lab For Computable Digital Transport Was Officially Launched

November 30, 2020

Article, Photo: Simon J. Hu
Translator: JIANG Junyue



Recently, Dr. CHEN Wenchao was awarded a grant from the Natural Science Foundation of Zhejiang Province for Distinguished Young Scholars, titled "Electromagnetics and Multiphysics Compatibility Design of Three-Dimensional Heterogenous Integrated Circuits." This program is established by the Natural Science Foundation of Zhejiang Province to support outstanding young scholars to carry out original and innovative research.

Multiphysics coupling processes, including electromagnetic-thermal-stress in high-density 3D heterogeneous ICs, can degrade the performance and reliability of devices/circuits, and the Multiphysics compatibility design is one of the most important issues for advanced integration technology. The project, led by Prof. CHEN Wenchao, intends to conduct research on the multiscale Multiphysics simulation methods in 3D heterogeneous ICs.

On November 29, 2020, the launch ceremony of the Virtual Lab for Computable Digital Transport (VLCDT), jointly organized by the School of Public Affairs of Zhejiang University and the Zhejiang University-University of Illinois at Urbana-Champaign Institution (ZJUI), was successfully held at the School of Public Affairs. Experts and scholars from Zhejiang Big Data Development Center, Zhejiang Provincial Transport Department, Zhejiang Provincial Public Security Department, Zhejiang Provincial Transportation Investment Group, Geely Automobile Research Institute, Fudan Planning and Architectural Design Institute, and other guests from government and research institutions participated in the event.

At the launching ceremony, ZJUI Vice Dean Professor Ma Hao gave an opening remarks, expounding that ZJUI pays great attention to intelligent transportation technology innovation and has been providing strong support for multidisciplinary cutting-edge research for a long time, and the establishment of the VLCDT will lead to a number of high-level innovations. Professor Zhang Weiwen, Vice Dean of School of Public Affairs of Zhejiang University, expressed the support of the School to the innovative development of interdisciplinary integration, and put forward ardent hope for the future development of the VLCDT.

ZJUI Assistant Professor Simon J. Hu delivered a keynote speech titled "Urban Digital Traffic Management and Optimization," introducing the research results of the Future Transportation Lab in the fields of traffic mode analysis, network-connected automated driving collaborative optimization and UAV-based traffic monitoring.

Research Professor WU Chao gave a keynote presentation titled "Deep Learning Based Urban Traffic Prediction," highlighting the existing achievements of the Computational Social Sciences Research Center in the field of intelligent transportation, including ride-hailing traffic forecasting and cell phone sensor-based road condition detection.

Mr. JIN Jiahe, Director of Zhejiang Big Data Development Center, extended warm congratulations on the establishment of the VLCDT and encouraged the VLCDT to aim at the international state-of-the-art technology and grasp the major needs of the development of intelligent transportation in his concluding remarks. He stressed the need to accelerate the development of standards for open data sharing, improve data security protection capabilities, and promote the integration of the digital economy and the real economy in the process of intelligent transportation construction.

After the launch ceremony, all the guests visited the lab together. The VLCDT students and faculty introduced the lab's achievements in the field of computable digital transportation in detail to the guests, and discussed the prediction and visualization analysis of ride-hailing traffic, urban road condition detection based on cell phone sensors, urban logistics vehicle path optimization based on distribution robots, trajectory optimization of driverless cars in a networked environment, optimization of urban logistics impact on the urban environment, and Hangzhou's smart city based TOD model research etc.

The VLCDT was founded by the Computational Social Sciences Research Center of Zhejiang University and the Future Transportation Lab of Zhejiang University. The establishment of the VLCDT will further promote the two sides to jointly carry out intelligent transportation research, dig deep into the digital value of the transportation field, promote the upgrade of the transportation industry intelligence, and provide more scientific data support for government transportation planning, public transportation optimization, transportation precision management and other applications.