

# The 19th International Conference on Future Information Technology (FutureTech 2024)

April 24-26, 2024  
Chongqing, China

**Organized by KCIA**  
**& Chongqing University of Posts and Telecommunications**  
**& Changsha University of Science and Technology**

## **2024 International Conferences** (Sponsored / Technically Sponsored by KCIA)

### **The 7th The International Conference on Big data, IoT, and Cloud Computing (BIC 2024)**

- August 12-14, Hanoi, Vietnam
- <http://bic-conference.org/2024/>

### **The 17h International Conference on Computer Science and its Applications (CSA 2024)**

- Dec 18-20, 2024
- <http://www.csa-conference.org/2024/>

## Message from the FutureTech 2024 General Chairs

FutureTech 2024 is the 19th event of the series of international scientific conference. This conference takes place on April 24-26, 2024 in Chongqing, China. The aim of the FutureTech 2024 is to provide an international forum for scientific research in the technologies and application of information technology. FutureTech 2024 is the next edition of FutureTech 2023(Phnom Penh, Cambodia), FutureTech 2022(Jeju, Korea), FutureTech 2021(Jeju, Korea), FutureTech 2020(Jeju, Korea), FutureTech 2019(Xian, China), FutureTech 2018(Salerno, Italy), FutureTech 2017(Seoul, Korea), FutureTech 2016(Beijing, China), FutureTech 2015(Hanoi, Vietnam), FutureTech 2014(Zhangjiajie, China), FutureTech 2013(Gwangju, Korea), FutureTech 2012(Vancouver, Canada), FutureTech 2011(Loutraki, Greece) and FutureTech 2010(Busan, Korea) which was the next event in a series of highly successful the International Symposium on Ubiquitous Applications & Security Services (UASS-09, USA, Jan. 2009), previously held as UASS-08 (Okinawa, Japan, Mar. 2008), UASS-07 (Kuala Lumpur, Malaysia, August, 2007) and UASS-06 (Glasgow, Scotland, UK, May, 2006).

The conference papers included in the proceedings cover the following topics: Hybrid Information Technology, High Performance Computing, Cloud and Cluster Computing, Ubiquitous Networks and Wireless Communications, Digital Convergence, Multimedia Convergence, Intelligent and Pervasive Applications, Security and Trust Computing, IT Management and Service, Bioinformatics and Bio-Inspired Computing, Database and Data Mining, Knowledge System and Intelligent Agent, Game and Graphics, and Human-centric Computing and Social Networks. Accepted and presented papers highlight new trends and challenges of future information technologies. We hope readers will find these results useful and inspiring for their future research.

We would like to express our sincere thanks to Steering Chair: James J. (Jong Hyuk) Park (SeoulTech, Korea), Young-Sik Jeong (Dongguk University, Korea) and Rui Li(Chongqing University of Posts and Telecommunications). Our special thanks go to the Program Chairs: Ji Su Park(Jeonju University, Korea), Yan Li(Inha University, Korea), Ka Lok Man(Xi'an Jiaotong-Liverpool University, China), S. Vimal(National Engineering College, India), all Program Committee members, and all reviewers for their valuable efforts in the review process that helped us to guarantee the highest quality of the selected papers for the conference.

We cordially thank all the authors for their valuable contributions and the other participants of this conference. The conference would not have been possible without their support. Thanks are also due to the many experts who contributed to making the event a success.

FutureTech 2024 General Chairs

Jungho Kang, Baewha Women's University, Korea  
Yang Xiao, The University of Alabama, USA  
Changhao Piao, Chongqing University of Posts and Telecommunications, China  
Sheng Lu, Chongqing University of Posts and Telecommunications, China

## Message from the FutureTech 2024 Program Chairs

Welcome to the 19th International Conference on Future Information Technology (FutureTech 2024), which will be held in Chongqing, China on April 24-26, 2024. FutureTech 2024 will be the most comprehensive conference focused on the various aspects of information technologies. It will provide an opportunity for academic and industry professionals to discuss recent progress in the area of future information technologies. In addition, the conference will publish high quality papers which are closely related to the various theories and practical applications in multimedia and ubiquitous engineering. Furthermore, we expect that the conference and its publications will be a trigger for further related research and technology improvements in these important subjects.

For FutureTech 2024, we received many paper submissions, after a rigorous peer review process, we accepted only articles with high quality for the FutureTech 2024 proceedings, published by the Springer. All submitted papers have undergone blind reviews by at least two reviewers from the technical program committee, which consists of leading researchers around the globe. Without their hard work, achieving such a high-quality proceeding would not have been possible. We take this opportunity to thank them for their great support and cooperation. Finally, we would like to thank all of you for your participation in our conference, and also thank all the authors, reviewers, and organizing committee members. Thank you and enjoy the conference!

FutureTech 2024 Program Chairs

Ji Su Park, Jeonju University, Korea

Yan Li, Inha University, Korea

Ka Lok Man, Xi'an Jiaotong-Liverpool University, China

S. Vimal, National Engineering College, India

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Yang Xiao, The University of Alabama, USA

Changhao Piao, Chongqing University of Posts and Telecommunications, China

Sheng Lu, Chongqing University of Posts and Telecommunications, China

### Program Chairs

Ji Su Park, Jeonju University, Korea

Yan Li, Inha University, Korea

Ka Lok Man, Xi'an Jiaotong-Liverpool University, China

S. Vimal, National Engineering College, India

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## Invited Speaker



### Metaverse and Smart Health

#### Yi Pan

Dean and Chair Professor Faculty of Computer Science and Control Engineering, Shenzhen Institute of Advanced Technology Chinese Academy of Sciences, China

Regents' Professor Emeritus Department of Computer Science Georgia State University, USA

#### Abstract

In 2021, "Metaverse" has become a hot word of the year among the world. Because it is a new concept, different people have different concepts of the Metaverse in their minds. Some people even say that the Metaverse is a lie and pseudoscience. However, I think that since so many companies and experts are pursuing this concept, it must have value, so we must first understand and study it before making a decision to accept, deny, or modify and improve it. As the Metaverse continues to mature, some basic consensus is being reached. This talk will introduce the basic concept, three stages, development history, supporting technology, eight basic features, five elements, and six characteristics of the Metaverse, and explain the applications and implementation challenges of the Metaverse in biomedical scenarios, including medical training, medical surgery, electronic health records/prescriptions, game therapy, digital medicine, disease diagnosis, virtual reality therapy, remote consultation, biological experiments, and pharmaceuticals using Metaverse..

#### Biography:

Dr. Yi Pan is currently a Chair Professor and the Dean of College of Computer Science and Control Engineering at Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences, China and a Regents' Professor Emeritus at Georgia State University, USA. He served as Chair of Computer Science Department at Georgia State University from 2005 to 2020. He has also served as an Interim Associate Dean and Chair of Biology Department during 2013-2017. Dr. Pan joined Georgia State University in 2000, was promoted to full professor in 2004, named a Distinguished University Professor in 2013 and designated a Regents' Professor (the highest recognition given to a faculty member by the University System of Georgia) in 2015.

Dr. Yi Pan is Fellow of American Institute for Medical and Biological Engineering, Foreign Member of Russian Academy of Engineering, Foreign Member of Ukrainian Academy of Engineering Science, Member of European Academy of Sciences and Arts, Member of European Academy of Natural Sciences, Fellow of the Royal Society for Public Health, Fellow of the Institute of Engineering and Technology, and Fellow of the Japan Society for the Promotion of Science.

Dr. Pan received his B.Eng. and M.Eng. degrees in computer engineering from Tsinghua University, China, in 1982 and 1984, respectively, and his Ph.D. degree in computer science from the University of Pittsburgh, USA, in 1991.

Dr. Pan has published more than 450 papers including over 250 journal papers with more than 100 papers published in IEEE/ACM Transactions/Journals. In addition, he has edited/authored 43 books. His work has been cited more than 20000 times based on Google Scholar and his current h-index is 90. Dr. Pan is currently serving as Editor-in-Chief of Big Data Mining and Analytics (a top 3% journal), Associate Editor-in-Chief of Journal of Computer Science and Technology (JCST), and Chinese Journal of Electronics (CJE). Dr. Pan has served as an editor-in-chief or editorial board member for 20 journals including 7 IEEE Transactions.

## Invited Speaker



### Thoughts and Practices on the Commercial Implementation of Intelligent Driving

Liang Fenghua

Vice GM, Chang-an Auto, Ltd., Chang-an Automobile Intelligent Research Institute, China; GM, Chongqing Changxian Intelligent Technology Co. Ltd, China

#### Abstract:

Intelligent driving helps the new automotive industry achieve a leap in value from assisting humans to liberating them to pleasing them, making it the key to winning the competition in the second half of the new automotive era. Currently, opportunities and challenges coexist for intelligent driving. In the short term, the market will still be in the stage of refining L2+ scenarios, facing difficulties in dealing with long-tail scenarios and balancing experience and safety. Given the opportunities and challenges, the ultimate development of intelligent driving requires a full modal and full-field AI big model, triggering changes in the model architecture and development paradigm of intelligent driving. In terms of commercial practice, Changan Automobile has constructed the SDA architecture, achieved hardware-software decoupling and soft-soft separation, introduced algorithms such as BEV model and AI PNC, and established systems such as vehicle-cloud integration and automatic annotation production lines. It has also created products such as NID3.0, APA7.0, and urban self-learning NOA, supporting the realization of the ultimate A-B full-scenario continuous experience.

#### Biography:

Liang Fenghua, professor of engineering and the deputy general manager of Changan Automobile Intelligent Research Institute and the general manager of Chongqing Changxian Intelligent Technology Co. Ltd. He is responsible for the technology planning and development of Changan Automobile's intelligent driving technologies. He has headed in developing 16 key technologies, including pedestrian automatic emergency braking, integrated adaptive cruise control, remote valet parking and remote intelligent parking, which were first applied on mass production among Chinese-brand cars. The team under his leadership has made 14 landmark achievements, which are ahead of automobile industry, like the national first long-distance (2,000 km) intelligent driving test and the Guinness World Records of 55 autonomous car parade.

He is the winner of the first prize of Chongqing Science and Technology Progress Award, the first prize of Anhui Science and Technology Progress Award, the first prize of China Automobile Industry Science and Technology Award, the first prize of the Science and Technology Progress Award of China South Industries Group Co., Ltd., the second prize of China National Defense Science and Technology Industrial Enterprise Management Innovation Achievement, and "Talents of Chongqing" etc. He has played a leading role in formulating the national standard of "Taxonomy of Driving Automation for Vehicles", and authored 5 research papers and 36 national invention patents.



## Invited Speaker



### Enhanced Remote Valet Parking

**Ping Liu**

Associate Professor of College of Automation, Chongqing University of Posts and Telecommunications, China Associate Director of Institute of Ecological Safety, Chongqing, China

#### **Abstract:**

With the rapid development of intelligent cars, the autonomous valet parking technique has significant application value in intelligent cyber-physical transportation systems. The 5G-V2X-based off-site dispatching enhanced remote automotive valet parking (E-AVP) is the crystallization of the deep integration of network intelligence and single-vehicle intelligence, and is an important way to achieve L4 level autonomous driving. The construction of an enhanced remote valet parking system is a complex systems engineering. This talk will introduce the basic concept, system architecture, electrical architecture, operating system and the corresponding supporting technologies for the construction of an E-AVP system. The presentation will cover interactive decision-making methods, parking guidance ways, parking trajectory planning strategies, and blockchain communication algorithms of the E-AVP system in detail. Moreover, significant demonstration results will be shared with all.

#### **Biography:**

Dr. Ping Liu is currently an associate professor of College of Automation, Chongqing University of Posts and Telecommunications, Chongqing, China. And he is the associate director of Institute of Ecological Safety, Chongqing University of Posts and Telecommunications. He is a member of the Adaptive Dynamic Programming and Reinforcement Learning (ADPRL) professional committee of the Chinese Association of Automation.

Dr. Liu received his B.Eng. degree in automation from the North China Electric Power University, China, in 2012 and his Ph.D. degree in control science & engineering from the Zhejiang University, China, in 2017. His main research contributions have been in a wide range of areas of engineering, including: unmanned driving, trajectory planning, optimization methods, planning and control of unmanned vehicles, computer vision, process control. He has published more than 30 journal papers and 6 invention patents. He has conducted or taken part in many national and province funding projects, including: National key R&D program, National Natural Science Foundation of China, Chongqing Natural Science Foundation Project, etc. Dr. Liu now serves as a local chair for the 19th International Conference on Future Information Technology (FutureTech2024).

# PROGRAM Schedule for FutureTech 2024 & MUE 2024

Day 1, April 24, 2024			
Time	Min	HALL A	HALL B
08:40-09:00	20	Registration(Open only until 4 PM)	
09:00-10:20	80	Session A-1 FutureTech Chair: Jian Huang	Session B-1 MUE Chair: Jueun Jeon
10:20-10:30	10	Coffee Break	
10:30-11:50	80	Session A-2 FutureTech Chair: Jiufei Luo	Session B-2 MUE Chair: Yoonjeong Kim
11:50-13:00	70	Lunch	
13:00-14:00	60	Keynote Speech: Prof. Yi Pan “Metaverse and Smart Health” Chair: Yan Li	
14:00-14:10	10	Coffee Break	
14:10-15:30	80	Session A-3 Korea-China Workshop Chair: Jonghyuk Park	Session B-3 MUE Chair: Dong-Hyuk Im
15:30-15:40	10	Coffee Break	
15:40-17:00	80	Session A-4 Korea-China Workshop Chair: Jonghyuk Park	Session B-4 MUE Chair: Byeong-Seok Shin
17:00-18:00	60	Break	
18:00-18:10	10	Welcome Speech: CQUPT Vice President Qinghua Zhang	
18:10-18:40	30	Keynote Speech: Vice GM Liang Fenghua “Thoughts and Practices on the Commercial Implementation of Intelligent Driving” Chair: Yan Li	
18:40-20:00	80	Banquet	

Day 2, April 25, 2024			
Time	Min	HALL A	HALL B
08:40-09:00	20	Registration (Open only until 11 AM)	
09:00-10:10	70	<b>Session A-5</b> <b>FutureTech</b> Chair: Jianguo Miao	<b>Session B-5</b> <b>MUE</b> Chair: Jueun Jeon
10:10-10:20	10	Coffee Break	
10:20-10:50	30	Keynote Speech: <b>Prof. Ping Liu</b> “Enhanced Remote Valet Parking” Chair: Yan Li	
10:50-12:00	70	<b>Session A-6</b> <b>FutureTech</b> Chair: Yang Fang	<b>Session B-6</b> <b>MUE</b> Chair: Joon-Min Gil
12:00-13:00	60	Lunch	
13:00-15:00	120	Organizing Committee Meeting I	
15:00-17:00	120	Local Arrangement Committee Meeting I	

Day 3, April 26, 2024			
Time	Min	HALL A	
09:00-10:30	90	Organizing Committee Meeting II	
10:30-12:00	90	Local Arrangement Committee Meeting II	

1. A paper presentation should be made by one of authors of the paper for 15 minutes (10 minutes for the presentation itself and 5 minutes for Q/A).
2. All speakers of each session should meet the session chair at their room 10 minutes before the session begins.
3. Windows OS PC/laptops running the Adobe Reader and Microsoft Office for paper presentations will be prepared. Please prepare for your presentation.
4. All online sections are played recorded video only.
5. For Q&A in the online section, please email the author.

**DETAILED SCHEDULE FOR**  
**THE 19TH INTERNATIONAL CONFERENCE ON FUTURE**  
**INFORMATION TECHNOLOGY**  
**(FUTURETECH 2024)**

**Day 1, April 24, 2024 (Wednesday)**

**08:40-09:00 Registration**

**09:00-10:20 Session A-1**  
**(HALL A)**  
**(Chair: Jian Huang)**

1. **A method for Invalid Wind Power Data Identification Based on Segmented Quartiles and Peak Detection**  
*Junsheng Chen, Zhongheng Zhang, Benchuan Li, Mingjie Liu, Changhao Piao*
2. **User portrait-based cabin thermal comfort temperature decision algorithm for new energy vehicles**  
*Yongwei Li, Yunpeng Shi, Wenqiang Li, Yang Luo*
3. **FYPnet: A Road Scene Perception Algorithm for On-board Chip Deployable Detection and Segmentation Optimization Fusion**  
*Yunpeng Shi, Yongwei Li, Wenqiang Li, Xin Zhou*
4. **A Sparse Array with Increasing Spacing for Fourth-order Different Co-array**  
*Jing Zhao, Sheng Liu, Decheng Wu*
5. **A Study of Absolute Planar Magnetic-field-shared Angular Displacement Sensors**  
*Liu Yongshang, Yang Yaquan, Wang Yang, Tang Qingyun, Luo Jiufei, Tang Qifu*
6. **An Img2Vec based Floor Recognition and Implementation Method**  
*Zhiqing Zhang, Liang Yan, Hang Zeng, Shulin Wu, Xu Zhang*

**10:20-10:30 Coffee Break**

**10:30-11:50 Session A-2**  
**(HALL A)**  
**(Chair: Jiufei Luo)**

1. **K-means Clustering Based on DARNN for Effective Fractional Investment Forecasting**  
*Gyoung-tae Kim, Jinhyun Ahn, Dong-Hyuk Im*
2. **A Federated Learning Algorithm Based on Multi-objective Optimization**  
*Daoqu Geng, Shouzheng Wang, Yihang Zhang*
3. **ESIF-Net: Edge-supervised Interactive Fusion Network for RGB-D Curtain Wall Frame Segmentation**

*Jianzhen Li, Xiaoyu Xu, Wendan Liu, Decheng Wu, Rui Li, Sheng Liu*

4. **Research on mechanical properties of the bolted joint of an EHV tower for smart transmission line**

*Mengyang Shui, Yang Zhao, Baojun Yang, Sheng Lu*

5. **Application Development of an Enhanced Autonomous Valet Parking System A Multi Label based Classification Method for Commodity Risk Assessment**

*Changhao Piao, Yi Xu, Jong Hyuk Park, Mingjie Liu*

6. **A Multi Label based Classification Method for Commodity Risk Assessment**

*Hongyu Tu, Houbing Zhang, Changjiu Ke, Yuran Dai, Xu Zhang*

**11:50-13:00 Lunch**

**13:00-14:00 Keynote Speech**

**(HALL KEYNOTE)**

**(Chair: Yan Li)**

**Prof. Yi Pan**

**“Metaverse and Smart Health”**

**14:00-14:10 Coffee Break**

**14:10-17:00 Session A-3 & Session A-4**

**(HALL A)**

**(Chair: Jonghyuk Park)**

**Special Section : Korea-China Workshop(Only Workshop Member)**

**17:00-18:00 Break**

**18:00-18:10 Welcome Speech**

**(JW MARRIOTT HOTEL CHONGQING)**

**CQUPT Vice President Qinghua Zhang**

**18:10-18:40 Keynote Speech**

**(JW MARRIOTT HOTEL CHONGQING)**

**(Chair: Yan Li)**

**Vice GM Liang Fenghua**

**“Thoughts and Practices on the Commercial Implementation of Intelligent Driving”**

**18:40-20:00 Banquet**

**(JW MARRIOTT HOTEL CHONGQING)**

## Day 2, April 25, 2024 (Thursday)

08:40-09:00 Registration

09:00-10:10 Session A-5

(HALL A)

(Chair: Jianguo Miao)

1. **Research on Video Stream Continuity Status Prediction of Connected Vehicles in V2X mode**  
*Changhao Piao, Dong Yin Wang, Jungho Kang, Ping Liu*
2. **Differential attention based dual-branch vehicle re-identification network**  
*Chenchen Zhang, Gen Zhao, Jing Wang, Xu Zhang*
3. **A blockchain-based archive version traceability and management method**  
*Weiran Zhang, Jianrong Chen, Ming Huang, Wenhao Yang, Xu Zhang*
4. **A Method for Predicting Smoking Population based on Cell Phone Signaling and Questionnaire Survey**  
*Yifeng Pi, Yingshan Cheng, Jianyong Ma, Xu Zhang*
5. **A Segmentation Method for Oil Debris Chains using YOLOV7-tiny and Labeled Watersheds**  
*Jie Yang, Song Feng*

10:10-10:20 Coffee Break

10:20-10:50 Keynote Speech

(HALL A)

(Chair: Yan Li)

**Prof. Ping Liu**  
“Enhanced Remote Valet Parking”

10:50-12:00 Session A-6

(HALL A)

(Chair: Yang Fang)

1. **Comparative Learning based Multi-Round Dialogue Intent Classification Method**  
*Feng Wei, Chenzi Wang, Yuan Huang, Xu Zhang*
2. **Medical Robot for Traditional Chinese Medicine Based on Infrared Thermal Imaging**  
*Xingchen Liu, Xiaoyu Xu, Rui Li, Decheng Wu, Shiming Wu, Jiahua Qin, Na Luo*
3. **An Improved Retinex-Net Low-Light Image Enhancement Method**  
*Zhiqiang Zhao, Yuanfei Wang, Xinyuan Ouyang, Yaofang Lu*

4. **Unlocking Your Sales Insights: Advanced XGBoost Forecasting Models for Amazon Products**  
*Meng Wang, Yuchen Liu, Gangmin Li, Terry R. Pyane, Yong Yue, Ka Lok Man*
5. **Integrated Automatic Parking Path Planning and Trajectory Tracking Optimization Method**  
*Changhao Piao, Yongkang Su, Junren Shi*

12:00-13:00    **Break**

13:00-15:00    **Local Arrangement Committee Meeting I**

15:00-17:00    **Organizing Committee Meeting I**

### **Day 3, April 26, 2024 (Friday)**

09:00-10:30    **Organizing Committee Meeting II**

10:30-12:00    **Local Arrangement Committee Meeting II**

**DETAILED SCHEDULE FOR**  
**THE 18TH INTERNATIONAL CONFERENCE ON**  
**MULTIMEDIA AND UBIQUITOUS ENGINEERING**  
**(MUE 2024)**

**Day 1, April 24, 2024 (Wednesday)**

**08:40-09:00 Registration**

**09:00-10:20 Session B-1**  
**(HALL B)**  
**(Chair: Jueun Jeon)**

1. **A data skew greedy optimization Strategy in Spark heterogeneous clusters**  
*Chen Huang, Xiaoyong Tang*
2. **A Novel Adaptive Coding Technology for Data Center Network**  
*Yang Rui*
3. **Research on Anti-Interrupted Sampling Repeater Jamming Method Based on Joint Matched Filter Design for Random Subcarrier Frequency Coding Time-Frequency Encoded Multi-Carrier Signals**  
*Ji Li, Rui Yan*
4. **A self-supervised semantic segmentation framework based on image inpainting**  
*Wenlong Tang, Peng Huang, Min Zhang*
5. **A semi-supervised semantic segmentation framework based on consistency regularization**  
*Wenlong Tang, Min Zhang, Peng Huang*

**10:20-10:30 Coffee Break**

**10:30-11:50 Session B-2**  
**(HALL B)**  
**(Chair: Yoonjeong Kim)**

1. **Waveform Design of OFDM-SF for Sea Clutter Suppression Based on Joint Filters**  
*Ji Li, JiaLiang Li*
2. **MCPA-DETR: Improving DETR with Modulated Constraint and Progressive Assignment for Accurate and Efficient Object Detection**  
*Chuang Zhang, Yan Gui, Zuwang Pang, Ruojun Guo*
3. **Robust detection and extraction of lane lines based on road constraints**  
*Zuwang Pan, Yan Gui*
4. **Image Splicing Detection Based on Deformable Large Kernel Attention Network**  
*Dengyong Zhang, Ningjing Jiang, Feng Li*



11:50-13:00 Lunch

13:00-14:00 **Keynote Speech**  
(HALL KEYNOTE)  
(Chair: Yan Li)

**Prof. Yi Pan**  
“Metaverse and Smart Health”

14:00-14:10 Coffee Break

14:10-15:30 **Session B-3**  
(HALL B)  
(Chair: Dong-Hyuk Im)

1. **Bridge Component Detection Based On Improved Object Detection Algorithm YOLOV7**  
*Peng Jian, Quanjing Zhang, Dengyong Zhang*
2. **Optimizing support vector machine for dam deformation prediction based on chameleon optimization algorithm**  
*Shuo Cai, Jie Zhang, Huixin Gao`*
3. **An image inpainting method based on bidirectional feature enhancement and multi-scale feature aggregation**  
*Ziqi Zhou, Dengyong Zhang, Rongrong Gong, Jiaxin Chen*
4. **Multi-time window runoff prediction for inland river basins in China based on Self-Attention-LSTM model**  
*Jingxian Jiang, Haowei Huang, Jin Zhang*

15:30-15:40 Coffee Break

15:40-17:00 **Session B-4**  
(HALL B)  
(Chair: Byeong-Seok Shin)

1. **Optimization of MaxSAT local search solver based on J-init assignment**  
*Chao Xu, Kang Liu*
2. **Far-field Speaker Verification Based on Adaptive Feature Alignment**  
*Lingyun Xiang, Jinghan Zhou, Chengfu Ou*
3. **Integrating Machine Learning, Blockchain, and Multi-access Edge Computing for Enhanced V2X communication Security**  
*Yonas Teweldemedhin Gebrezgiher, Jong Hyuk Park*
4. **Quantum Security Techniques for Privacy Preservation in IoT Networks**  
*Minji Kim, Jonghyuk Park, Jisu Park*

17:00-18:00 Break

18:00-18:10 Welcome Speech  
(JW MARRIOTT HOTEL CHONGQING)

CQUPT Vice President Qinghua Zhang

18:10-18:40 Keynote Speech  
(JW MARRIOTT HOTEL CHONGQING)  
(Chair: Yan Li)

Vice GM Liang Fenghua

“Thoughts and Practices on the Commercial Implementation of Intelligent Driving”

18:40-20:00 Banquet  
(JW MARRIOTT HOTEL CHONGQING)

## Day 2, April 25, 2024 (Thursday)

08:40-09:00 Registration

09:00-10:10 Session B-5  
(HALL B)  
(Chair: Jueun Jeon)

1. **Intelligent Resource Management Scheme for Efficient Cloud-based Digital Twinning**  
*Byeonghui Jeong, Jueun Jeon, Young-Sik Jeong*
2. **Scale-Adaptive Deformable Convolution based Multi-Scale Feature Fusion Network for Industrial Defect Detection**  
*Jingyi Li, Yan Li, Zuyu Zhang, Zongjing Cao, Byeong-Seok Shin*
3. **Consistency of Class Activation Map Shannon Entropy Probability and Class Posterior Probability for Out-of-Distribution Detection**  
*Zongjing Cao, Yan Li, Byeong-Seok Shin*
4. **Machine Learning Models for Fire Damage Forecasting: A Comparative Study**  
*Yan Li, Gyoung-Bae Kim, Weonil Jeong*

10:10-10:20 Coffee Break

**10:20-10:50**    **Keynote Speech**  
**(HALL A)**  
**(Chair: Yan Li)**

**Prof. Ping Liu**  
**“Enhanced Remote Valet Parking”**

**10:50-12:00**    **Session B-6**  
**(HALL B)**  
**(Chair: Joon-Min Gil)**

- 1. Research Paper Classification and Recommendation System: A Comparison Study between BERT and ELMo**  
*Dipto Biswas, Joon-Min Gil*
- 2. Design of Learn and Earn Technique based on Smart Contract**  
*Min Choi, Eru Choi*
- 3. Open World Object Detection with Optimized Latent Space Clustering Strategy for Efficient Out-of-Distribution Detection**  
*Iqbal Muhammad Ali, Soo Kyun Kim*

**12:00-13:00**    **Break**

**13:00-15:00**    **Local Arrangement Committee Meeting I**

**15:00-17:00**    **Organizing Committee Meeting I**

### **Day 3, April 26, 2024 (Friday)**

**09:00-10:30**    **Organizing Committee Meeting II**

**10:30-12:00**    **Local Arrangement Committee Meeting II**

## Conference Venue



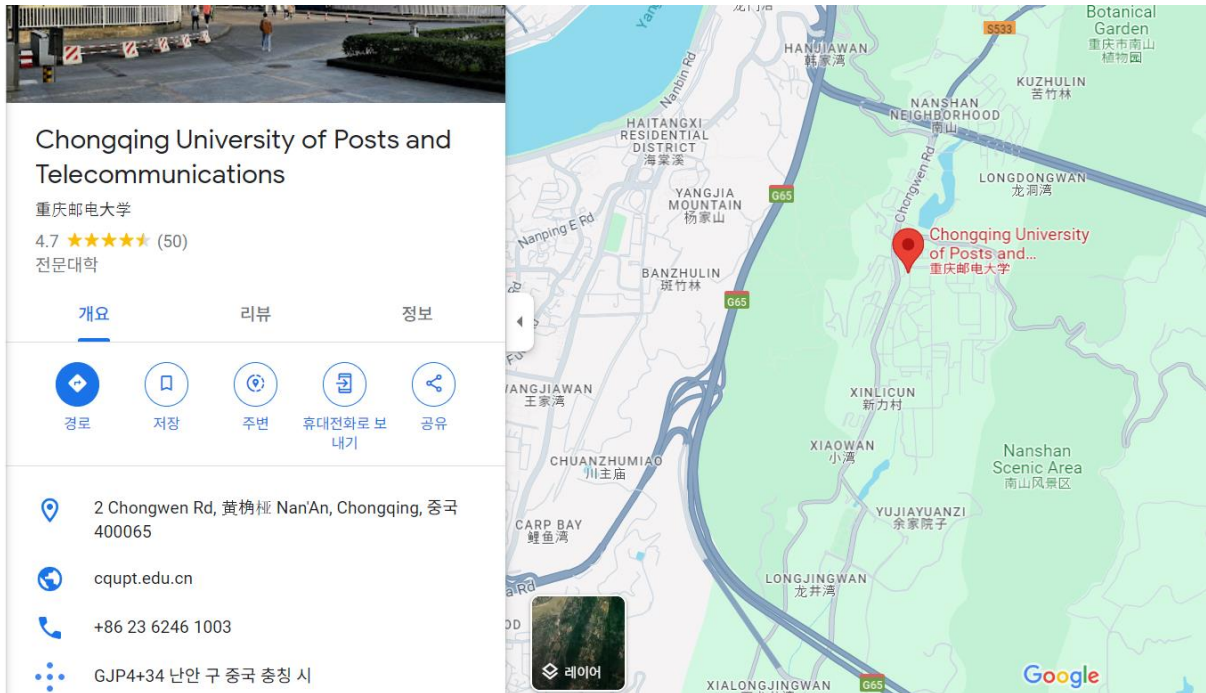
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## Banquet

### JW MARRIOTT HOTEL CHONGQING

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