2021 International Conference on Computer Engineering and Artificial Intelligence

ICCEAI 2021

Conference Program

Vienna International Hotel Shanghai Pudong Xiupu Road

August 27-29, 2021, Shanghai, China

Co-Sponsored by

Shanghai Pudong New Area Association For Computer, China

Shanghai University of Engineering Science, China

Jiangxi University of Finance and Economics, China

Shijiazhuang Tiedao University, China

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Jiangxi Key Lab of Digital Media, China

China Computer Federation Nanchang Chapter, China

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Message from the ICCEAI 2021 General Chairs

2021 International Conference on Computer Engineering and Artificial Intelligence (ICCEAI 2021) aims at providing a high-level platform for experts, scholars, innovators and practitioners to share novel research and ideas in the fields of Computer Engineering and Artificial Intelligence. The conference plans to be held in Shanghai, China, from August 27 to 29, 2021. ICCEAI 2021 features Keynote Speeches from eminent professors all over the world and technical presentation from participants in different parts of world. All the program will cover a wide range of topics to cater to the needs of specific subject areas for researchers as well as faculty members.

ICCEAI 2021 is Co-Sponsored by Shanghai University Of Engineering Science, Shanghai Pudong New Area Association For Computer, Jiangxi University of Finance and Economics, Shijiazhuang Tiedao University, Jiangxi Institute of Electronics, Jiangxi Key Lab of Digital Media, China Computer Federation Nanchang Chapter, Hunan University of Humanities, Science and Technology.

We would like to express our sincere thanks to the Program Chairs: Prof. Pan Lin (Hunan Normal University, China), Prof. Huijuan Lu (China Jiliang University, China), all program committee members and all the additional reviewers for their valuable efforts in the review process, which 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.

Prof. Zhijun Fang, Shanghai University Of Engineering Science, China
Prof. Yong Yang, Jiangxi University of Finance and Economics, China
Prof. Vijayakumar Varadarajan, European Digital University, USA
ICCEAI 2021 General Conference Chairs

Message from the ICCEAI 2021 Program Chairs

Welcome to the 2021 International Conference on Computer Engineering and Artificial Intelligence (ICCEAI 2021), will be held from August 27-29, 2021, in Shanghai, China. ICCEAI 2021 will be the most comprehensive conference focused on the Computer Engineering and Artificial Intelligence. ICCEAI 2021 will provide an opportunity for academic and industry professionals to discuss recent progress in the area of Computer Engineering and Artificial Intelligence. In addition, the conference will publish high quality papers which are closely related to the various theories and practical applications on Computer Engineering and Artificial Intelligence. 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 ICCEAI 2021, we received many paper submissions, after a rigorous peer review process, only very outstanding paper can be accepted for the ICCEAI 2021 proceedings, published by the Conference Publishing Services (CPS). 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. We also 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!

Prof. Pan Lin, Hunan Normal University, China
Prof. Huijuan Lu, China Jiliang University, China
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Cybersecurity - A Game Theory Approach: Issues, modelling and computer science applications

Prof. Dr. Sardar M. N. Islam (Naz)
ISILC, & Decision Sciences and Modelling Program, Victoria University, Australia

Abstract: Cybersecurity is a multiagent system where intelligent agents interact, formulate strategies, fight, cooperate, coordinate, design systems, and plan actions to achieve their goals of cybersecurity or hacking and malicious damages. Game theory analyses and formulates strategies and designs rules or mechanisms for this cybersecurity multiagent system on the basis of artificial intelligence. For specifying, characterising and modelling and designing this intelligent multiagent system, mathematical game theory models of different forms can be developed, such as static, dynamic, evolutionary, differential and stochastic game theory models. Different algorithms such as Nash equilibrium, joint optimisation, evolutionary algorithms, neural networks, genetic algorithms, and other machine learning algorithms can be applied to different game theory models for analysing, solving, and computing these cybersecurity models. Findings from these models are used to formulate strategies, cooperate, coordinate, design systems, and plan actions by different intelligent agents and authorities in cybersecurity. Game theory application in cybersecurity is an important area in computer science for doing highly useful academic and practical cybersecurity activities and for academics and practitioners to build their careers. Therefore, it is necessary to prioritise this area of game theory in cybersecurity in computer science for research and development.

Short Bio: Professor Dr. Sardar M. N. Islam (Naz) is Professior from Victoria University, Australia. As professor he has lived, studied, and worked in different countries and visited (extensively) different regions of the world for a long period, he adopts a global and humanistic approach in his research and academic works and he has undertaken rigorous scientific studies of emerging issues of different disciplines of artificial intelligence, business analytics, digitalisation, management science, etc. His academic work has gained international acclaim, resulting in many (1) Honours and Awards, (1) distinguished visiting or adjunct professorial appointments in different countries, (2) appointment in editorial roles of journals and (3) keynote speeches at international conferences in several countries. He has published 29 scholarly academic books in different disciplines. Each of these books makes significant scientific contributions to the literature. These books are published by prestigious publishers and the majority books are published in highly regarded book series. He has also published about 250 articles, including some top leading international journal articles in his specialised research areas.

Industry 4.0: Transforming the Traditional Industries to Next Generation Smart Factories

Dr. Anand Nayyar
Professor and Scientist, Graduate School, Duy Tan University, Da Nang, Viet Nam

Abstract: Current Industry in almost every aspect is undergoing a transformation towards full digitalization and intelligentization of manufacturing processes via smart connectivity, networked entities, real-time data processing and pervasive information. The fourth Industrial revolution “Industry 4.0” is announced by Germany in 2011 and is characterized by automation and digitization, collaborative robotics, 3D Printing, Optimization and Management of Assets, sharing and security of data, tracking parts from cradle to grave, big data analytics as above all Artificial Intelligence with strong support via Machine Learning and Deep Learning.
In this Lecture, I cover aspects with regard to Industrial Revolution, Driving Forces and Key technologies enabling Industry 4.0, Current challenges faced in real-time implementations, in-depth coverage with regard to Technical Terminologies like Cyber-Physical Systems, Smart Factories, Smart Manufacturing, Intelligent Technical Systems. The lecture will also enlighten current adaption of IIoT (Industrial Internet of Things) cum Automation of various industries across nook and corner around the world. In addition of this, lecture will provide key points towards Research areas in Industry 4.0 and future standard i.e. Industry X.0.

Short Bio: Dr. Anand Nayyar received Ph.D (Computer Science) from Desh Bhagat University in 2017 in the area of Wireless Sensor Networks and Swarm Intelligence. He is currently working in Graduate School, Duy Tan University, Da Nang, Vietnam. A Certified Professional with 75+ Professional certificates from CISCO, Microsoft, Oracle, Google, Beingcert, EXIN, GAQM, Cyberoam and many more. Published 450+ Research Papers in various National & International Conferences, International Journals (Scopus/SCI/SCIE/SSCI Indexed) with High Impact Factor. Member of more than 50+ Associations as Senior and Life Member and also acting as ACM Distinguished Speaker. He has authored/co-authored cum Edited 30+ Books of Computer Science. Associated with more than 500 International Conferences as Programme Committee/Chair/Advisory Board/Review Board member. He has 5 Australian Patents to his credit in the area of Wireless Communications, Artificial Intelligence, IoT and Image Processing. He is currently working in the area of Wireless Sensor Networks, IoT, Swarm Intelligence, Cloud Computing, Artificial Intelligence, Blockchain, Cyber Security, Network Simulation and Wireless Communications. Awarded 30+ Awards for Teaching and Research—Young Scientist, Best Scientist, Young Researcher Award, Outstanding Researcher Award, Excellence in Teaching and many more. He is acting as Associate Editor for Wireless Networks (Springer), IET-Quantum Communications, IET Wireless Sensor Systems, IET Networks, IJDST, IJISP, IJCINI. He is acting as Editor-in-Chief of IGI-Global, USA Journal titled “International Journal of Smart Vehicles and Smart Transportation (IJSVST)”.

Remote sensing and AI

Prof. Huiyu Zhou
School of Informatics, University of Leicester, UK

Abstract of the talk: In this talk, I will first introduce what remote sensing images are about. Then, I describe the characteristics and classification of remote sensing images in different applications. Afterwards, I give an overview of the current challenges in remote sensing, before introducing some of our recent works. Finally, I predict the future work in remote sensing in addition to the summary of the talk as well as the introduction of the open data cube project.

Keywords: Remote sensing; artificial intelligence; challenges; object detection and classification.

Bio of the presenter: Prof. Huiyu Zhou received a Bachelor of Engineering degree in Radio Technology from Huazhong University of Science and Technology of China, and a Master of Science degree in Biomedical Engineering from University of Dundee of United Kingdom, respectively. He was awarded a Doctor of Philosophy degree in Computer Vision from Heriot-Watt University, Edinburgh, United Kingdom. Dr. Zhou currently is a Professor at School of Informatics, University of Leicester, United Kingdom. He has published over 350 peer-reviewed papers in the field. He was the recipient of "CVIU 2012 Most Cited Paper Award", “MIUA 2020 Best Paper Award”, “ICPRAM 2016 Best Paper Award” and was nominated for “ICPRAM 2017 Best Student Paper Award” and "MBEC 2006 Nightingale Prize". Dr. Zhou serves as the Editor-in-Chief of Recent Advances in Electrical & Electronic Engineering and Associate Editor of "IEEE Transaction on Human-Machine Systems", “IEEE Journal of Biomedical and Health Informatics”, “Pattern Recognition”, “PeerJ Computer Science” and “IEEE Access”, and Area Chair of IJCAI and BMVC. He is one of the Technical Committee of “IEEE Cognitive and Development Systems”, “Information Assurance & Intelligent Multimedia-Mobile Communication in IEEE SMC Society”, “Robotics Task Force” and “Biometrics Task Force” of the Intelligent Systems Applications Technical Committee, IEEE Computational Intelligence Society. He has given over 100 invited talks at international conferences, industry and universities, and has served as a chair for 70 international conferences and workshops. His research work has been or is being supported by UK EPSRC, MRC, EU, Royal Society, Leverhulme Trust, Puffin Trust, Alzheimer’s Research UK, Invest NI and industry.

Intelligence Extenics: Five Layer-Intelligence of the Machine Brain

Dr. Wenfeng Wang
School of Electrical and Electronic Engineering, Shanghai Institute of Technology, China

Abstract: In the past decades, machine intelligence has been rapidly developed. The current machine intelligence level can be summarized as “five layer intelligence” - environments sensing, active learning, cognitive computing, intelligent decision making and automatic execution. The final goal is a real intelligence (termed as the machine brain) which would support machines to work as well as the human. Five layer intelligence is not the real intelligence, but it presents a frame of intelligence extenics and it is already on the way to the machine brain.

Short Bio: Dr Wenfeng Wang is currently a full professor of School of Electrical and Electronic Engineering, Shanghai Institute of Technology. He is also the director of International Academy of Visual Art and Engineering in London and Shanghai JWE Technological Research Center. He has been invited as a tenure professor and the editor in chief of International Journal of Electronics and Engineering (IJEEE). He is also a key tallent in Ningbo Institute of Materials Technology and Engineering, Chinese Academy of Sciences (2018-). A reviewer of many SCI journals, including some top journals - Water Research, Science China-Information Sciences, Science of the Total Environment, Environmental Pollution, IEEE Transactions on Automation Science and Engineering and etc. A keynote speaker of AMICR2019, IACICE2020, OAES2020, AICS2021, 3DIT-MSP&DL2020 and etc. A scientist in chief of RealMax, Shanghai Lingang Artificial Intelligence Laboratory and etc.

Gray Box: Deep Reinforcement Learning-enabled Approach for Large-Scale Dynamic System Simulation

Dr. Yang Yang, IEEE Fellow
ShanghaiTech University, China

Abstract(CN)： The massive data generated by large-scale dynamic systems makes its optimization facing a big challenge. Traditional White Box-based methods directly model the internal operating mechanism of the system, so massive amounts of measured data need to be handled, which is costly and time-consuming. The poor interpretability of the Black Box-based methods makes it difficult to adapt to the dynamic environments. In this talk, we propose a novel Gray Box-based approach namely Deep Reinforcement Learning-enabled Constraint Set Inversion Algorithm (DRESIA), which establishes a quantitative model of the nonlinear interoperability effects of system internal states which simplifies the White Box's complex mechanism of reconstruction and prediction and retains the interpretability of the model, therefore improves the prediction efficiency of feasible region while also improving the generalization ability.

Personal Info(CN)： Dr. Yang Yang is a full professor at ShanghaiTech University, China, serving as the Master of Kedao College and the Director of Shanghai Institute of Fog Computing Technology (SHIFT). He is also an adjunct professor with the Research Center for Network Communication at Peng Cheng Laboratory, China. Yang's research interests include fog computing networks, service-oriented collaborative intelligence, wireless sensor networks, IoT applications, and advanced testbeds and experiments. He has published more than 300 papers and filed more than 80 technical patents in these research areas. Yang is a Fellow of the IEEE.

Robots and Deep Bayesian Learning: Robots capable of self-healing and adapting

Dr. Andre Rosendo
ShanghaiTech University, China

Abstract(EN)： Abstract: Although current artificial intelligence (AI) explores learning techniques to create thinking machines through simulations, I argue that the interaction with the real-world is essential for the convergence in true intelligence. With this in mind, I present the Deep Bayesian Learning framework applied to robots, either by a robot capable of creating other robots and improving their performance over time, or, more recently, by our latest experiments incrementally cutting one of the legs of a robot and using Bayesian Optimization to adapt the gait of that robot. I will talk about robots capable of combining Deep Learning and Bayesian Learning to simultaneously alter their morphology and control. The future of robotics remains uncertain, but the capacity of adapting their design and altering their morphology to fulfil tasks more effectively can be a driving force for future Robotics.

Bio: Dr. Andre Rosendo received his Master and Ph.D. degrees from Hokkaido University and Osaka university, in 2011 and 2014, respectively, and finished his postdoc at the University of Cambridge in 2017. He started as a Tenure Track Assistant Professor at ShanghaiTech University at the same year.
He has published more than 50 scientific papers in more than 15 IEEE conferences, worked as Program Committee for a few IEEE conferences and is currently the Associate Editor of the journals Frontiers in Robotics and AI and the Journal of Robotic and Intelligent Systems. In 2019 and 2020 he was awarded the 国家自然科学基金外国学者研究基金 Grant, the 上海高校青年东方学者岗 Grant and the 年上海市外国专家项目 Award.

Speeding Up IPv4 Connections via IPv6 Infrastructure

Prof. Dr. Xin Wang
School of Computer Science, Fudan University, Shanghai, China

Abstract: In the transition process from IPv4 to IPv6, the lack of customer demand remains a major problem for Internet Service Providers. With the increasing traffic in IPv4 networks, the ISPs' operational cost is growing while the user experience will be degraded. We propose a solution for these problems by transferring IPv4 traffic through the IPv6 core network. By providing better services for IPv4 end users, such as stabler connections, lower latency and better QoS, our solution can serve as an incentive for ISPs to gradually upgrade to pure IPv6 networks. In this demo, we showcase that better service quality for IPv4 end-to-end connections can be acquired by transferring traffic from heavy-loaded IPv4 core network to light-loaded IPv6 core network, using stateless IPv4/IPv6 translation techniques.

Short Bio: Xin Wang is a professor at Fudan University, Shanghai, China. He received his BS Degree in Information Theory and MS Degree in Communication and Electronic Systems from Xidian University, China, in 1994 and 1997, respectively. He received his Ph.D. Degree in Computer
Science from Shizuoka University, Japan, in 2002. His research interests include quality of network service, next-generation network architecture, mobile Internet and network coding.

Conference Schedule

Date	Time	Vienna International Hotel	Bach Hall（巴赫厅）
2021-08-27	13:00-20:00	Registration	
2021-08-28	09:00-09:25		Opening Remarks
	09:25-10:10	Keynote by Sardar M. N. Islam (Online Presentation)	
	10:10-10:55	Keynote by Anand Nayyar (Online Presentation)	
	10:55-11:40	Keynote by Huiyu Zhou (Online Presentation)	
	11:40-13:00	Lunch	
	14:00-14:45	Keynote by Wenfeng Wang (Online Presentation)	
	14:45-15:30	Keynote by Yang Yang (Online Presentation)	
	15:30-16:15	Keynote by Andre Rosendo (Online Presentation)	
	16:15-17:00	Keynote by Xin Wang (Online Presentation)	
	17:20-19:00	Dinner	
2021-08-29	08:40-10:20		Oral Session A
	10:20-12:00		Oral Session B
	12:00-13:20	Lunch	
	13:40-15:40		Oral Session C
	15:40-17:40		Oral Session D

Instructions for Presentations

Oral Presentation

Devices Provided by the Conference:

Laptops (with MS-Office & Adobe Reader)

Projectors & Screen

Materials Provided by the Presenters:

PowerPoint or PDF files

Duration of each Presentation (Tentatively): 20 minutes

Regular Oral Session: about 20 Minutes of Presentation

Keynote Speech: 45 Minutes of Presentation

Poster Session

Poster Session at Bach Hall. The time at August 29, 2021

Devices Provided by the Conference:

Space and nails

Materials Provided by the Presenters:

90cm(h) × 60cm(b) poster

August 27, 2021
Registration 13:00-20:00

August 28, 2021
09:00—09:25 Opening Remarks and Take Photos

09:25-10:10 Keynote 1
Title: Cybersecurity - A Game Theory Approach: Issues, modelling and computer science applications
Prof. Dr. Sardar M. N. Islam (Naz)

10:10-10:55 Keynote 2
Title: Industry 4.0: Transforming the Traditional Industries to Next Generation Smart Factories
Dr. Anand Nayyar

10:55-11:40 Keynote 3
Title: Remote sensing and AI
Prof. Huiyu Zhou

12:00-13:20 Lunch

14:00-14:45 Keynote 4
Title: Intelligence Extenics: Five Layer-Intelligence of the Machine Brain
Dr. Wenfeng Wang

14:45-15:30 Keynote 5
Title: Gray Box: Deep Reinforcement Learning-enabled Approach for Large-Scale Dynamic System Simulation
Dr. Yang Yang, IEEE Fellow

15:30-16:15 Keynote 6
Title: Robots and Deep Bayesian Learning: Robots capable of self-healing and adapting
Dr. Andre Rosendo

16:15-17:00 Keynote 7
Title: Speeding Up IPv4 Connections via IPv6 Infrastructure
Prof. Dr. Xin Wang

17:20-19:00 Dinner

August 29, 2021

08:40-10:20 Oral Session A

1112	Artificial Intelligence Brain	Lian Wang, Yuexue Xia
1132	Communication Application of Distributed Energy Resources Monitoring System Based on XMPP	Lingyan Sun, Yu Chen, Qian Cheng, Baihan Zhu, Changming Chen, Xiaoning Hou
1133	Evaluating the Speedup of Multicore Architecture on the Topological Characteristics of On-chip Memory	Hong Zhang, Xiaojun Wang
1144	Aspect oriented Sentiment classification of COVID-19 twitter data; an enhanced LDA based text analytic approach	Junaid Abdul Wahid, Lei Shi, Hailing Wang, Zhaoyuang Wu, Yufei Gao, Shabir Hussain
1146	Numerical Stability Analysis of Baota Mountain in Yan'an City	Ma Qiang, Zhang Shunfu, Qiao Nan*, Zheng Huiyang
1147	Fine and Coarse-Grained Feature Learning for Unsupervised Person Re-identification	Hua Han, Senior Member, IEEE, Jiamin Tang, Li Huang, Yujin Zhang

10:20-12:00 Oral Session B

1148	A Summary of the Latest Research on Knowledge Graph Technology	Wu Yu, Fu Xue feng, Xu Lichen, Jiang Zhao Feng
1151	The way of survival based on heuristic Dijkstra algorithm	Zhang Haidong, Chen Qiuyu, Dou Yajie*
1173	Risk Analysis Based on Quantum Theory	Yang ZhiMei, Pan Ping
1183	Hyperspectral image fusion by hybrid regularizations with local low-rank	Zhaoyang Liu, Mingxi Ma* , Zhaoming Wu
1190	Tabu Annealing Lion Swarm Optimization Algorithm	Falei Ji, Mingyan Jiang
1196	A New Deep Learning Method for Multi-label Facial Expression Recognition based on Local Constraint Features	Wanzhao LI, Peng ZHANG, Wei HUANG

12:00-13:20 Lunch

13:40-15:40 Oral Session C

1198	A Novel Framework to Synthesize Arterial Spin Labeling Images using Difference Images	Feihong LI, Peng ZHANG, Wei HUANG
1208	Improve the interpretability by decision tree regression: exampled by an insurance dataset	Shuyuan Dong, Dingzhou Fei
1217	A Security Scheme for Industrial Internet Platform Based on Trusted Computing Technology	Peiru Fan, Zhang Wei, Yaobing Li, Hao Jiang
1232	Age Estimation Using Channel Aggregation Transform Based On Deep Neural Network	XiaoDing Lu, Zhengyou Wang, Shanna Zhuang

1233	Feature Extraction of Dual-convolutional Network with LBP for Face Anti-Spoofing	Ming Guo, Zhengyou Wang, Shanna Zhuang
1234	LSTIF:Long-short Temporal Information Fusion Architecture for Video-based Person Re-identification	Xin Sun, Shanna Zhuang, Zhengyou Wang
1235	PFF-FPN: A Parallel Feature Fusion Module Based on FPN in Pedestrian Detection	Guiyi Yang, Zhengyou Wang, Shanna Zhuang

15:40-17:40 Oral Session D

1241	Domain Adaptation Based on ResADDA Model for Face Anti-Spoofing Detection	Feng Jun, Dong Zhiyi, Shi Yichen, Hu Jingjing
1244	3D Human Pose Estimation : Using Context Information in Monocular Video	Yuanmin Zhou, Xiaoyan Hu
1245	Object retrieval system based on feature matching technology	Yuhao Zhang, Xiaoyan Hu
1252	Automobile airbag defect detection algorithm based on improved Faster RCNN	Linjie Luo, Zhaoming Wu*, Chengzhi Deng, Shengqian Wang, Tianyu Ye
1268	Residual Enhancement Network for Realistic Face Sketch-Photo Synthesis	Weiguo Wan, Yong Yang, Wei Tu
1269	The Algorithm and Application of Fast Surface Slice and Color Acquisition for Color 3D Printing	Yang Xiao, Yi Wang, Yi Yang

Poster Session

A comparative study of deep learning approaches for Chinese Sentence Classification	Zhu Zeng, Harin Dharmendra Upadhyay, Xiaoping Zeng
A Comparative Study on the Individual Stock Price Prediction with the Application of Neural Network Models	Wenchao Lu, Wen Ge, Rong Li, Lin Yang*
A hemispheric surface improvement method based on parametric method	Xuecong Han, Shanna Zhuang, Wenshuang Lu, Zhengyou Wang
A Literature Review of Innovation and Corporate Social Responsibilities	Yan Wang, Yayun Zheng
A Method for Designing and Analyzing Automotive Software Architecture: A Case Study for an Autonomous Electric Vehicle	Junghwan Lee
A New Bottom-up Human Pose Estimation Method by Body Center and Anchor Points	Jiahua Wu, Hyo Jong Lee
A Practical Base Station Location Optimization Based On Four Networks Integration	Zhou Chunli, Chen Zhijun
A sentiment classification algorithm of Bi-LSTM model fused with weighted word vectors	CHAOHUI CHAI, DONGRU RUAN
An Improved Non-local Mean Filtering Algorithm Based on Medical Image Restoration	Songjian Bao

Analysis of China's Pension Financial Sustainability Based on Actuarial Model and Confidence Interval Theory	Wang Haiyang
Analysis of Different Passivation Solute Weight Ratio on Performance Influence of Indium Oxide Electronic Characteristics	Hongbo GUO, Yan LI, Li ZHANG, Ning LI, Haohan HU
Anomaly detection of electricity load data based on MixMatch	Shijun Sun, Yatong Zhou*, Hao He, Jingfei He, Yue Chi
Application of Fuming Tablet Combined with Liraglutide in the Treatment of Diabetic Retinopathy	Lijuan Gao , Lingling Wu,
Application of three-dimensional digital modeling of teeth and jaws in orthodontics teaching	Jia Guo*, Xusen Wang, Hongfang Zhao, Junjie Wang
Application research of massive power data prediction based on combinatorial model	Pengcheng LI, Haitao ZHANG, Haohan Hu, Wanlong LIU, Li ZHANG
Automatic Recognition of Harmful Algae Images Using Multiple CNNs	Mengyu Yang1, a, Wensi Wang1, 2, b, *, Qiang Gao1, c Liting Zhang1, d, Yanping Ji1, e, Shuqin Geng1, f
Bearing fault diagnosis based on attention mechanism and deep residual network	XinNa Ma, Lin Qi, Meng Zhao
Changes of Parathyroid Hormone and Osteocalcin in Diabetic Patients with Different Syndromes of Deafness	Li Ruiyu*#, Li Yue#, Li Meng , Guo Weiya, Zhang Chenyu, Hou Jinjie
Classical Chinese Poetry Generation based on Transformer-XL	Jianli Zhao, Hyo Jong Lee
CLRC: a New Erasure Code Localization Algorithm for HDFS	Ying Fang1, Shuaifang Wang1*, Hai Tan2*, Xin Zhang2 , Jun Zhang2
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