ICCBD 2023

2023 6TH INTERNATIONAL CONFERENCE ON COMPUTING AND BIG DATA

CSEA 2023

2023 5TH INTERNATIONAL CONFERENCE ON COMPUTER, SOFTWARE ENGINEERING AND APPLICATIONS

ICEBI&ICEBB

CONFERENCE PROGRAM

October 27-29, 2023
Virtual Conference

Supported By

上海理工大學 UNIVERSITY OF SHANGHAI FOR SCIENCE AND TECHNOLOGY
南方科技大学 SOUTHERN UNIVERSITY OF SCIENCE AND TECHNOLOGY
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2023 6th International Conference on Computing and Big Data (ICCBD 2023)

2023年第六届计算与大数据国际会议

2023 5th International Conference on Computer, Software Engineering and Applications (CSEA 2023)

2023年第五届计算机、软件工程与应用国际会议

7th International Conference on E-Business and Internet (ICEBI 2023)&
6th International Conference on E-Business and Business Engineering (ICEBB 2023)

Shanghai, China&Singapore |October 27-29, 2023

中国上海&新加坡 | 2023 年 10 月 27 日-29 日

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WELCOME ADDRESS 欢迎辞

Welcome to the 2023 6th International Conference on Computing and Big Data (ICCBD)& 2023 5th International Conference on Computer, Software Engineering and Applications (CSEA) and the 7th International Conference on E-Business and Internet (ICEBI) &the 6th International Conference on E-Business and Business Engineering (ICEBB).

The 6th International Conference on Computing and Big Data (ICCBD) & 2023 5th International Conference on Computer, Software Engineering and Applications (CSEA) are organized by University of Shanghai for Science and Technology, China and supported by Southern University of Science and Technology, China, Shanghai Jiao Tong University, China. The 7th International Conference on E-Business and Internet (ICEBI) & the 6th International Conference on E-Business and Business Engineering (ICEBB) are supported by Singapore University of Social Science, Singapore, Nanyang Technology University, Singapore, University of Pardubice, Czech Republic and BINUS University, Indonesia.

The conference will feature three keynote speeches and four invited speeches from leading experts in the field. There will be 4 Technical Sessions related to Digital network architecture design and network security monitoring, Model -based visual application design and intelligent detection, Data model and data analysis and Network -based e -commerce platform construction and information management providing ample opportunities for attendees to engage with the speakers and each other.

The success of 2023 ICCBD, CSEA, ICEBI and ICEBB would not be possible without the tireless efforts of the organizers. Special thanks go to University of Shanghai for Science and Technology, China for their leadership in bringing this event to life.

The organizing committee's dedication to making this a successful event is greatly appreciated. Their hard work and attention to detail have ensured that the conference runs smoothly and meets the expectations of all participants. In addition, the contributions of the reviewers cannot be overstated. Their expert opinions and suggestions have helped to ensure the quality and relevance of the conference content.

Once again, thank you to all those who have been involved in making this conference a reality. We are confident that these keynote and invited speakers will provide valuable insights and thought-provoking discussions, and we hope that all attendees will have an enjoyable and productive experience and actively contribute to the success of the conference.

ICCBD&CSEA&ICEBI&ICEBB 2023
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GUIDELINES OF ONLINE CONFERENCE参会指南

Time Zone 时区

- **Oct. 27th – Oct.29th**—Beijing Standard Time—GMT/UTC+8
- Please set up the alarm to remind yourself for the real-time test and presentation.
- **Join the Test Session before the Formal Session**
- Date: **10:00-12:00** | **Oct. 27, 2023**
- Prior to the formal meeting, presenters shall join the test room to ensure everything is on the right track. Please check your test time in this program. Please mute when you enter the zoom.

ZOOM ID 在线会议室信息

- Online Session Test (Find the details in Agenda Overview)
- General Users Download: https://zoom.us/support/download
- Zoom Help Center: https://support.zoom.us
- Zoom ID:

Room A: 824 7771 2900 **Password:** ICCBD2023
https://us02web.zoom.us/j/82477712900/

Room B: 821 4704 3555 **Password:** ICEBI2023
https://us02web.zoom.us/j/82147043555/

Equipment & Environment Needed 设备指导

- A computer with internet connection and camera
- Headphones
- Quiet Location
- Stable internet connection
- Proper lighting and background

Language 会议语言

- Please make presentation in English. Please feel free to discuss in English or during Q&A.

Presentation Recording and Broadcasting 报告录像声明

- The photograph(s) or video or audio recording(s) will be taken by the conference organizer. It will be used for publication review.
- Do not record other presenters' presentations nor distribute them or share with anyone unless the presenter gives written consent or agrees. Failure to do so will be considered a serious academic violation subject to disciplinary/ lawful action.

AGENDA OVERVIEW 日程概览

Day 1 | Oct. 27, 2023
(Beijing Time UTC+8)

Time	Activity	Zoom ID
10:00-12:00	**Zoom Testing** 在线测试	**Online Session 1,3** Room A: 824 7771 2900 Password: ICCBD2023
		Online Session 2,4 Room B: 821 4704 3555 Password: ICEBI2023

Day 2 | Oct. 28, 2023
(Beijing Time UTC+8)

Time	Activity		Room
Chaired By: Prof. Weidong Li, University of Shanghai for Science and Technology, China			Room A
09:00-09:10	**Opening Remarks** 开幕致辞	**Prof. Weidong Li** University of Shanghai for Science and Technology, China	
09:10-09:50	**Keynote Speech** 主旨报告	**Prof. Ender Ayanoglu (IEEE Fellow)** University of California, USA ***Speech Title:*** *Machine Learning in NextG Networks via Generative Adversarial Networks*	
09:50-10:30	**Keynote Speech** 主旨报告	**Prof. LEE Kwok On Matthew** City University of Hong Kong, China ***Speech Title:*** *Why are we so addicted to cyber worlds: from Tamagotchi to Metaverse*	
10:30-10:50	**Group Photo & Break**		

10:50-11:30	**Keynote Speech** **主旨报告**	**Prof. Jiangchuan (JC) Liu (IEEE Fellow)** Simon Fraser University, Canada ***Speech Title:*** *Towards Ubiquitous and Immersive Networked Media: For Human and For Machine*	
11:30-12:00	**Invited Speech** **邀请报告**	**Assoc. Prof. Wei Wang** Xi'an Jiaotong-Liverpool University, China ***Speech Title:*** *Zero-shot Text Classification with External Knowledge*	
12:00-14:00	**Lunch Time**		
14:00-14:30	**Invited Speech** **邀请报告**	**Assoc. Prof. Dong Huang** South China Agricultural University, China ***Speech Title:*** *Recent Advances in Large-scale Graph Learning*	Room A
14:30-15:00	**Invited Speech** **邀请报告**	**Prof. Petr Hajek** University of Pardubice, Czech Republic ***Speech Title:*** *Recent Advances in Detecting Fake Reviews in E-commerce Platforms*	
15:00-15:10	**Break Time**		

Parallel Sessions 报告分会

Room	Room A: 824 7771 2900 Password: ICCBD2023	Room B: 821 4704 3555 Password: ICEBI2023
15:10-17:10	**Session 1**-Digital network architecture design and network security monitoring 数字网络架构设计与网络安全监测 **Session Chair:** Senior Lecturer. Dr. Mohd Hafeez Osman, Universiti Putra Malaysia, Malaysia **Presentation ID:** BD3009, BD4004, BD4002, BD4005, BD3005, BD4007, BD3019, BD4010	**Session 2**-Network -based e -commerce platform construction and information management 基于网络的电子商务平台建构及信息管理 **Session Chair:** Prof. Petr Hajek, University of Pardubice, Czech Republic **Presentation ID:** EB2206, EB2205, EB2221, EB2216, EB2223, EB2224, EB2227, EB3004, EB2228

Day 3 | Oct. 29, 2023

Invited Speeches 邀请报告	
ZOOM INFO	Room A: **824 7771 2900** Password: ICCBD2023
09:20-09:50	**Prof. Kin-Choong Yow,** University of Regina, Canada ***Speech Title:*** *Advances in Generative AI: (GenAI): The Technology, the Applications and the Threats*
09:50-10:00	**Break Time**

Parallel Sessions 报告分会		
ZOOM INFO	Session 3 Room A: 824 7771 2900 Password: ICCBD2023	Session 4 Room B: 821 4704 3555 Password: ICEBI2023
10:00-11:45	**Session 3**-Model -based visual application design and intelligent detection 基于模型的可视化应用程序设计与智能检测 **Session Chair:** Prof. Kin-Choong Yow, University of Regina, Canada **Presentation ID:** BD4015, BD3023, BD3011, BD3013, BD3024, BD4006, BD3010, BD4016	**Session 4**-Data model and data analysis 数据模型与数据分析 **Session Chair:** Assoc. Prof. Hui Na Chua, Sunway University, Malaysia **Presentation ID:** BD3008, BD3007, BD3021, BD4009, BD3017, BD3016, BD3028, BD3029

KEYNOTE SPEAKER 主旨报告

Beijing Time	09:10-09:50 2023.10.28	Meeting Room	Room A: 824 7771 2900 Password: ICCBD2023

Prof. Ender Ayanoglu (IEEE Fellow)

University of California, USA

Speech Title: Machine Learning in NextG Networks via Generative Adversarial Networks

BIO

Ender Ayanoglu received the Ph.D. degree from Stanford University, Stanford, CA in 1986, in electrical engineering. He was with the Communications Systems Research Laboratory, Bell Laboratories until 1999. From 1999 until 2002, he was a Systems Architect at Cisco Systems, Inc., San Jose, CA. Since 2002, he has been a Professor in the Department of Electrical Engineering and Computer Science, University of California, Irvine, Irvine, CA During 2000-2001, he served as the founding chair of the IEEE-ISTO Broadband Wireless Internet Forum (BWIF). From 1993 until 2014, Dr. Ayanoglu was an Editor, and since January 2014 is a Senior Editor of the IEEE Transactions on Communications. He served as the Editor-in-Chief of the IEEE Transactions on Communications from 2004 to 2008. From January 2015 until December 2016 he served as the Editor-in-Chief of the IEEE Journal on Selected Areas in Communications - Series on Green Communications and Networking, and from August 2016 to August 2020 the Founding Editor-in-Chief of the IEEE Transactions on Green Communications and Networking. From 1990 to 2002, he served on the Executive Committee of the IEEE Communications Society Communication Theory Committee, and from 1999 to 2002, was its Chair. He has been an IEEE Fellow since 1998. He is an IEEE Communications Society Distinguished Lecturer 2022-2023.

ABSTRACT

Due to the explosive growth of new users and new applications, it is expected that the wireless spectrum will need to be used in a dynamic fashion starting in the near future. This can be achieved by using the concept of cognitive radio, giving users access to the unused spectwm under dynamic spectrum access. It is generally accepted that conventional methods of cognitive radio will fall short of being able to handle the enormous demand for spectral resources, and therefore it is expected that techniques from artificial intelligence or machine learning will help provide dynamic control for spectrum sharing. The process of spectrum sharing begins with sensing the spectrum. Recently, a number of techniques for spectrum sensing employing machine learning have been introduced. In this talk, we employ a machine learning approach known as generative adversarial networks towards this purpose. This particular approach is known to be very successful for anomaly detection in image processing. We alter performance criteria used in this set of networks from image processing applications to wireless and employ such networks for spectrum sensing, both in conventional and cooperative spectrum sensing. Initial results show the efficacy of this approach.

KEYNOTE SPEAKER 主旨报告

Beijing Time	09:50-10:30 2023.10.28	Meeting Room	Room A: 824 7771 2900 Password: ICCBD2023

Prof. LEE Kwok On Matthew

City University of Hong Kong, China

Speech Title: Why are we so addicted to cyber worlds: from Tamagotchi to Metaverse

BIO

Professor Matthew K. O. Lee is Chair Professor of Information Systems & E-Commerce at the City University of Hong Kong (CityU). Professor Lee holds a first-class honors bachelor's degree in electronic engineering, an MSc in software engineering, a Ph.D. in computer science, an MBA, and two law degrees. He is the recipient of several prestigious University scholarships and prizes, including an IEE Prize and a College Scholarship from Oxford University where he read for one of his degrees.

Professor Lee has a research and professional interest in IT-based innovation adoption and diffusion, knowledge management, electronic commerce, online social networks, online addiction, and the development of digital competence. He was Chairman of the Hong Kong Committee for Pacific Economic Cooperation (HKCPEC) advising the HKSAR Government on relevant APEC-related economic and cooperation matters (2016-2022), and he is currently a council member of the Hong Kong Productivity Council.

Professor Lee has published over one hundred refereed articles in leading international journals, conference proceedings, and research textbooks. His research has generated substantial impact as witnessed by his strong citation record. According to the "H-Index for Management Information Systems" published by the University of Arizona in May 2022, Prof Lee ranks in the top 3 in Asia as an MIS professor. He is ranked among the top 2% of scientists in his field since 2020, according to annual reports and data metrics published by Stanford University. Professor Lee is a recipient of the Research.com Business and Management in China Leader Award, being ranked as one of the top 10 best scientists in the field of business and management in China.

(Google Scholar Citations: 32649; H-Index: 77 - as of 16 June 2023).

ABSTRACT

The prevalence of digital technology and our reliance on it has given rise to new types of behavioral addiction problems. The pertinent phenomena are serious enough that in the latest edition of the International Classification of Diseases (ICD 11) promulgated by the World Health Organization, cyber behavioral addiction such as video and online gaming addiction has been recognized as a new mental health disorder. Scientists across multiple fields worldwide are currently debating whether, and if so, to what extent and how we should classify and treat digital technology engendered compulsive behavioral phenomena such as those related to social networks, online shopping, and smart phone addiction. In Nature, the foremost scientific journal in the world, there has been recent calls for research into a wider variety of behavioral addictions, especially those facilitated by digital platforms such as the Internet . Meanwhile, real world businesses have been leveraging on behavioral addiction mechanisms to attract customers, uplift consumer engagement, improve loyalty and profit. The global video gaming market alone is estimated to grow from $229.16 billion in 2021 to $545.98 billion in 2028 , with over 3 billion players currently and an increasing portion of them suffering from addiction and related problems. There is a pressing research need for a better understanding of the cyber behavioral addiction phenomenon and the underlying processes and mechanisms, so that effective prevention and treatment strategies may be developed.

This talk will review some of the key research approaches and findings in the domain of cyber behavioral addiction, highlighting major challenges and opportunities for breakthroughs in the future.

KEYNOTE SPEAKER 主旨报告

Beijing Time	10:50-11:30 2023.10.28	Meeting Room	Room A: 824 7771 2900 Password: ICCBD2023

Prof. Jiangchuan (JC) Liu (IEEE Fellow)

Simon Fraser University, Canada

Speech Title: Towards Ubiquitous and Immersive Networked Media: For Human and For Machine

BIO

Jiangchuan Liu is a Full Professor in the School of Computing Science, Simon Fraser University, British Columbia, Canada. He is a Fellow of The Canadian Academy of Engineering, an IEEE Fellow, and an NSERC E.W.R. Steacie Memorial Fellow. In the past he worked as an Assistant Professor at The Chinese University of Hong Kong, a research fellow at Microsoft Research Asia, and an EMC-Endowed Visiting Chair Professor of Tsinghua University.He received the BEng degree (cum laude) from Tsinghua University, Beijing, China, in 1999, and the PhD degree from The Hong Kong University of Science and Technology in 2003, both in computer science. He is a co-recipient of the inaugural Test of Time Paper Award of IEEE INFOCOM (2015), ACM SIGMM TOMCCAP Nicolas D. Georganas Best Paper Award (2013), ACM Multimedia Best Paper Award (2012), and IEEE MASS Best Paper Award (2021). His research interests include multimedia systems and networks, cloud and edge computing, social networking, online gaming, and Internet of things/RFID/backscatter. He has served on the editorial boards of IEEE/ACM Transactions on Networking, IEEE Transactions on Network Sciences and Engineering, IEEE Transactions on Big Data, IEEE Transactions on Multimedia, IEEE Communications Surveys and Tutorials, and IEEE Internet of Things Journal. He is a Steering Committee member of IEEE Transactions on Mobile Computing and Steering Committee Chair of IEEE/ACM IWQoS (2015-2017). He was TPC Co-Chair of IEEE INFOCOM'2021 and General Co-Chair of INFOCOM'2024.

ABSTRACT

Cyberspace has long had an ambitious goal --- connecting the world, understanding the world, and interacting with the world, both physically and virtually, for human beings and machines, anytime and anywhere. This remained a dream a decade ago. With the unprecedented development in the Information and Communication Technology (ICT) sector in the past decade, however, it is now solid and reachable to a great extent, if not all.In this talk, we will discuss our recent works on ubiquitous and immersive media over the Internet and advanced mobile networks with personalized experience. Besides human beings as consumers, we will further explore the new world when machines act as media content consumers, with a focus on mobile video analytics with edge assistance.

INVITED SPEAKER 邀请报告

Beijing Time	11:30-12:00 2023.10.28	Meeting Room	Room A: 824 7771 2900 Password: ICCBD2023

Assoc. Prof. Wei Wang

Xi'an Jiaotong-Liverpool University, China

Speech Title: Zero-shot Text Classification with External Knowledge

BIO

Dr. Wei Wang is a senior associate professor at the Department of Computing, School of Advanced Technology, Xi'an Jiaotong-Liverpool University, China. He received his PhD in Computer Science from the University of Nottingham in 2009. He then worked as a lecturer at the University of Nottingham (Malaysia Campus) and later a post-doctoral research fellow at the Centre for Communication Systems Research (now known as the Institute for Communication Systems) at the University of Surrey, UK. His research interests lie in the broad area of data and knowledge engineering; in particular, deep learning and natural language processing, knowledge discovery from textual data, social media data and smart city data processing, and semantic search. He has published more than 70 papers in reputed journals (e.g. IEEE TKDE, IEEE TNNLS, IEEE IoTj, IEEE TSG, IEEE TETCI, ELSEVIER INS, and ELSEVIER IF) and conferences in the areas knowledge discovery, information sciences and Internet of Things.

ABSTRACT

Knowledge resources, e.g. knowledge graphs (KG), which formally represent essential semantics and information for logic inference and reasoning, can compensate for the unawareness nature of linguistic knowledge in many natural language processing (NLP) applications based on deep neural networks. In this talk, we present our recent work on text classification, which is fundamental to many real-world applications, e.g. sentiment analysis, recommender systems and automatic text annotation. With unprecedented amount of textual data and new topics/concepts being continuously produced, it is unlikely or even infeasible to collect labelled samples covering all topics for training effective classification models. Zero-shot learning with external knowledge bases provides potential solutions to alleviate such problems. We consider different settings in zero-shot classification and integrate both descriptive and structural knowledge from external knowledge resources to improve classification performance.

INVITED SPEAKER 邀请报告

Beijing Time	14:00-14:30 2023.10.28	Meeting Room	Room A: 824 7771 2900 Password: ICCBD2023

Assoc. Prof. Dong Huang

South China Agricultural University, China

Speech Title: Recent Advances in Large-scale Graph Learning

BIO

Dong Huang received the B.S. degree in computer science in 2009 from South China University of Technology, Guangzhou, China. He received the M.Sc. degree in computer science in 2011 and the Ph.D. degree in computer science in 2015, both from Sun Yat-sen University, Guangzhou, China. He joined South China Agricultural University in 2015, where he is currently an Associate Professor with the College of Mathematics and Informatics. From July 2017 to July 2018, he was a visiting fellow with the School of Computer Science and Engineering, Nanyang Technological University, Singapore. His research interests include data mining and machine learning. He has published more than 70 papers in international journals and conferences, such as IEEE TKDE, IEEE TNNLS, IEEE TCYB, IEEE TSMC-S, IEEE TETCI, ACM TKDD, SIGKDD, AAAI, and ICDM. He was the recipient of the 2020 ACM Guangzhou Rising Star Award.

ABSTRACT

Graph learning is an fundamental technique in machine learning and data mining. In this speech, I will introduce some of our recent advances in graph learning, with a special emphasis on the large-scale bipartite graph learning problem. Particularly, several sub-topics will be covered, including (i) large-scale one-step bipartite graph cut, (ii) unsupervised multi-view graph learning (coupled with feature selection, graph fusion, subspace learning, etc.), and (iii) deep graph learning for image clustering. Finally, current challenges and future directions will be discussed.

INVITED SPEAKER 邀请报告

Beijing Time	14:30-15:00 2023.10.28	Meeting Room	Room A: 824 7771 2900 Password: ICCBD2023

Prof. Petr Hajek

University of Pardubice, Czech Republic

Speech Title: Recent Advances in Detecting Fake Reviews in E-commerce Platforms

BIO

Petr Hajek is currently a Professor with the Science and Research Centre, Faculty of Economics and Administration, University of Pardubice, Czech Republic. He was also a visiting professor of the University of Czestochowa. He is the author or coauthor of five books and more than 70 articles in leading journals such as the Information Sciences, Decision Support Systems and Knowledge-Based Systems. His current research interests include business decision making, soft computing, text mining and knowledge-based systems. He has served on many international program committees and he is also a member of the editorial board of several international leading journals. He was a recipient of the Rector Award for Scientific Excellence in 2018 and 2019, respectively, and six Best Paper Awards at international scientific conferences.

ABSTRACT

Online consumer reviews are increasingly recognized as a key source of information affecting consumer behaviour. More and more consumers tend to share their experience on products and services through online platforms such as Amazon or Yelp. These opinions are considered more trustworthy than advertisements form the businesses themselves. In addition, most marketplaces like Amazon give priority to well-evaluated products. For businesses, it is therefore tempting to purchase fake reviews because competitive advantage can be easily achieved by producing positive or negative fake reviews. Moreover, fake online reviews tend to be more influential than genuine online reviews. Therefore, understanding how fake online consumer reviews can be automatically detected is obviously of great importance not only to consumers but also to effectively monitor the online platforms by providing higher accuracy than manual detection techniques. The last decade of research into fake review detection has seen the development of methods to automatically classify fake and genuine consumer reviews. This is a challenging problem because fake reviews are required to sound authentic as if written by real consumers. The talk will introduce recent advances in methods developed to tackle this problem. I will describe how combining review- and reviewer-centric features can be used to detect fake reviews with the help of machine learning methods.

INVITED SPEAKER 邀请报告

Beijing Time	09:20-09:50 2023.10.29	Meeting Room	Room A: 824 7771 2900 Password: ICCBD2023

Prof. Kin-Choong Yow

University of Regina, Canada

Speech Title: Advances in Generative AI: (GenAI): The Technology, the Applications and the Threats

BIO

Kin-Choong Yow obtained his B.Eng (Elect) with 1st Class Honours from the National University of Singapore in 1993, and his Ph.D. from Cambridge University, UK in 1998. He joined the University of Regina in September 2018, where he is presently a Professor in the Faculty of Engineering and Applied Science. Prior to joining UofR, he was an Associate Professor in the Gwangju Institute of Science and Technology (GIST), Republic of Korea, (2013-2018), Professor at the Shenzhen Institutes of Advanced Technology (SIAT), P.R. China (2012-2013), and Associate Professor at the Nanyang Technological University (NTU), Singapore (1998-2013). In 1999-2005, he served as the Sub-Dean of Computer Engineering in NTU, and in 2006-2008, he served as the Associate Dean of Admissions in NTU.

Kin-Choong Yow's research interest is in Artificial General Intelligence and Smart Environments. Artificial General Intelligence (AGI) is a higher form of Machine Intelligence (or Artificial Intelligence) where the intelligent agent (or machine) is able to successfully perform any intellectual task that a human being can. Kin-Choong Yow has published over 100 top quality international journal and conference papers, and he has served as reviewer for a number of premier journals and conferences, including the IEEE Wireless Communications and the IEEE Transactions on Education. He has been invited to give presentations at various scientific meetings and workshops, such as ACIRS, in 2018 and 2019; ICSPIC, in 2018; and ICATME, in 2021. He is the Editor-in-Chief of the Journal of Advances in Information Technology (JAIT), a Managing Editor of the International Journal of Information Technology (IntJIT), and a Guest Editor of MDPI Applied Sciences. He is also a member of APEGS and ACM, and a senior member with the IEEE.

ABSTRACT

ChatGPT and Generative Artificial Intelligence (GenAI) has taken the world by storm and revolutionized various fields, including computer vision, natural language processing, and creative arts. This talk aims to provide participants with a brief understanding of generative AI techniques, their applications, and their threats to the community. We will begin with the fundamentals of GenAI and will discuss key concepts such as Large Language Models (LLMs), Next Sentence Prediction (NSP), Mask Language Modeling (MLM), Contrastive Language-Image Pre-training (CLIP), etc. We will then discuss some of the applications such as generating human-like text in a wide range of styles and formats such as news articles, stories and poems, and text-to-image generation for a wide range of images including objects, animals, scenes, and abstract concepts. Finally, we will talk about the various threats they pose to our community, such as fake information, ethical breaches as well as replacing human jobs.

Parallel Session 1 报告分会1

Session Topic: Digital network architecture design and network security monitoring 数字网络架构设计与网络安全监测

Taipei Time 15:10-17:10 | 2023.10.28

Meeting Room Room A: 824 7771 2900 Password: ICCBD2023

Chair: Senior Lecturer. Mohd Hafeez Osman, Universiti Putra Malaysia, Malaysia

Time Table

Time	Paper ID	Presenter	Affiliation
15:10-15:25	BD3009	Zhang Hui	Chinese Flight Test Establishment, China
15:25-15:40	BD4004	William P. Rey	Mapua University, Philippines
15:40-15:55	BD4002	He Youjie	Nanjing University of Science and Technology, China
15:55-16:10	BD4005	William P. Rey	Mapua University, Philippines
16:10-16:25	BD3005	Yang Meijuan	Chinese Flight Test Establishment, China
16:25-16:40	BD4007	William P. Rey	Mapua University, Philippines
16:40-16:55	BD3019	Imran Zualkernan	American University of Sharjah, UAE
16:55-17:10	BD4010	Mark Joshua B. Vilar	Mapua University, Philippines

Paper Details

Paper ID	Title & Authors
BD3009	Full-Duplex V-band Radio over Fiber Transmission Based on Microwave Photonic Self-Heterodyne Conversion Zhang Hui, Rui Nie, Yaojia Nie and Meijuan Yang

BD4004	Mamamayan: A Mobile Community-based Emergency Reporting and Notification System for the City of Makati in the Philippines William P. Rey, Sydney Alison S. Adalin, Khristopher Ross L. Cacanog and Gian Windsor R. Jimenez
BD4002	Research on Internet Governance Behavior Based on Internet Social Responsibility Qi Yong, Xu Feng, Shi Chang, Gao Kaili and He Youjie
BD4005	Towards a Redundant Internetwork Structure of an Inter-Autonomous System in a State University Network in the Philippines William P. Rey and Kieth Wilhelm Jan D. Rey
BD3005	Design and Implementation of Area Detection Method Based on Ray Crossing Yang Meijuan, Li Wenlong, Nie Rui and Zhang Wei
BD4007	MidwestCloud: a centralized SDN-based Network Management Design, Integration, and Deployment for an Academic Institution in Marinduque Islands, Philippines William P. Rey
BD3019	Towards Unsupervised Analysis of Dakar Motorcycle Rally Data Harshit Jiandani, Rohan Mitra and Imran Zualkernan
BD4010	Neglected Cyber Threats on the Rise: Combatting IoT Botnet Infection Techniques Through the Elucidation of Machine Learning Eric B. Blancaflor, Renee Charlene B. Evangelista, Rondisney R. Maligmat, Denise Nicole B. Marcelo, Bryan Jorel P. Pablo and Mark Joshua B. Vilar

Parallel Session 2 报告分会2

Session Topic: Network -based e -commerce platform construction and information management 基于网络的电子商务平台建构及信息管理

Taipei Time 15:10-17:10 | 2023.10.28

Meeting Room Room B: 821 4704 3555 Password: ICEBI2023

Chair: Prof. Petr Hajek, University of Pardubice, Czech Republic

Time Table

Time	Paper ID	Presenter	Affiliation
15:10-15:25	EB2206	Donn Enrique L. Moreno	Mapua Malayan Colleges Laguna, Philippines
15:25-15:40	EB2205	Bambang Leo Handoko	Bina Nusantara University, Indonesia
15:40-15:55	EB2221	Donn Enrique L. Moreno	Mapua Malayan Colleges Laguna, Philippines
15:55-16:10	EB2216	Yakun Wang	Nanning University, China
16:10-16:25	EB2223	Jasmine A.L. Yeap	Universiti Sains Malaysia, Malaysia
16:25-16:40	EB2224	Dan Yuan	Guangdong University of Science and Technology, China
16:40-16:55	EB2227	Yue Sun	Wuhan Business University, China
16:55-17:10	EB3004	Shini Li	Guangzhou Xinhua University, China
17:10-17:25	EB2228	Xinyu Liu	Wuhan Business University, China

Paper Details

Paper ID	Title & Authors
EB2206	The Mediating Effect of Replenishment Decisions on Cloud-Based Inventory Management and Record Keeping Performance: Evidence from Micro Businesses in Laguna, Philippines

	Donn Enrique L. Moreno, Marielle Cristine Francia, Erin Abigail R. Harina, Mae Clarisse F. Javier
EB2205	Model Predicting the Use of Institution Level Financial Application System Bambang Leo Handoko, Gen Norman Thomas and Lely Indriati
EB2221	The Impact of Mobile-Commerce Application Characteristics on Customer's Perceived Experience and Spending Habits in the Philippines Donn Enrique Moreno,Sheane Nicole Matias, Richard Carl Amboy, Ma. Bernice Bernales, Mark Laurens Corales, Jean Claude Corpuz, Jaeron Carl Panzo
EB2216	Big data analysis of Satisfaction with Wealth Management Business in Online Banking of Chinese Rural Commercial Banks Yakun Wang, Mengyue He and Huiting Li
EB2223	Ready For RIoT? A Pilot Study on Consumers' Patronage Intention Towards Smart Stores Jasmine Yeap, Say Keat Ooi, Ramayah Thurasamy and Normalini Md Kassim
EB2224	Analysis and Prediction of the Cultural-Tourism High-Quality Development in Guangdong Province Dan Yuan, Yijun Zhang and Ying Yu
EB2227	A Study on User Stickiness of the Content E-Commerce Platform and the Influencing Factors Yue Sun, Ying Zhan and Fanjinjun Zeng
EB3004	The Mediating Role of Perceived Value between Product Placement's Salience and Purchase Intention to Buy Snacks among Chinese College Students — A Case Study of BESTORE in TV Series He Yu, Shini Li, Guangzhou Xinhua University, China
EB2228	A Study on the Formation Mechanism of User Stickiness in Traditional E-commerce Platforms Based on the SOR Model Xinyu Liu, Wuhan Business University, China

Parallel Session 3 报告分会3

Session Topic: Model -based visual application design and intelligent detection
基于模型的可视化应用程序设计与智能检测

Taipei Time 10:00-12:00 | 2023.10.29

Meeting Room Room A: 824 7771 2900 Password: ICCBD2023

Chair: Prof. Kin-Choong Yow, University of Regina, Canada

Time Table

Time	Paper ID	Presenter	Affiliation
10:00-10:15	BD4015	Harvey G. Habie	Mapua University, Philippines
10:15-10:30	BD3023	Byungseok Kang	dob Studio, South Korea
10:30-10:45	BD3011	Jinliang Zhang	Wuhan University of Technology, China
10:45-11:00	BD3013	Brainard Almar Villaverde	Mapua University, Philippines
11:00-11:15	BD3024	Youyang Zhang	University of Science and Technology Liaoning, China
11:15-11:30	BD4006	William P. Rey	Mapua University, Philippines
11:30-11:45	BD3010	Ziqian Guo	Wuhan University of Technology, China
11:45-12:00	BD4016	Antonette D. Gabriel	Mapua University, Philippines

Paper Details

Paper ID	Title & Authors
BD4015	Fragment: A Horror Game Prototype Utilizing a Dynamic Difficulty Adjustment System through Agent Behavior Gloren S. Fuentes，Harvey G. Habie and Clarence Stephen L. Murillo

BD3023	Icon-based coding software with multi-user evaluation mode Byungseok Kang
BD3011	Dynamic Digital Twin Modeling towards Ship Operation and Maintenance Process Ziqian Guo, Ling Peng, Wenjun Xu, Jiayi Liu and Ruifang Li
BD3013	Backpropagation Neural Network – Based Prediction of Crack Depth in Fly-Ash Geopolymer Concrete with Akaike and Bayesian Information Criterion Brainard Almar Villaverde, Dante Silva and Bernard Villaverde
BD3024	SDCM: An efficient Camellia oleifera fruits detection algorithm in dense occlusion scenes Youyang Zhang, Qiuxia Chen and Wenhua Cui
BD4006	Empirical Assessment of the MAFIS Mobile App's Usability Based on the People at the Center of Mobile Application Development (PACMAD) Model William P. Rey，Kieth Wilhelm Jan D. Rey
BD3010	Digital Twin-based Model Reconfiguration Method for Ship Design using NSGA-Ⅱ Jinliang Zhang, Ling Peng, Wenjun Xu, Jiayi Liu and Yang Hu
BD4016	DogGoCare: A C2C E-commerce Mobile Application Platform Designed for Pets Queenie Nicole L. Evangelista, Angela Jonyl C. Reyes, Antonette D. Gabriel

Parallel Session 4

Session Topic: Data model and data analysis 数据模型与数据分析

Taipei Time 10:00-12:00 | 2023.10.29

Meeting Room Room B: 821 4704 3555 Password: ICEBI2023

Chair: Assoc. Prof. Hui Na Chua, Sunway University, Malaysia

Time Table

Time	Paper ID	Presenter	Affiliation
10:00-10:15	BD3008	Ruibing Wu	BNU-HKBU United International College, China
10:15-10:30	BD3007	Ji-shuang Zhu	China Waterborne Transport Research Institute, China
10:30-10:45	BD3021	Yuheng Yao	BeiHang University, China
10:45-11:00	BD4009	Jeremey Joshua M. Yao	Mapua University, Philippines
11:00-11:15	BD3017	Weiwei Li	National Innovation Institute of Defense Technology, China
11:15-11:30	BD3016	Zhilong Zhu	Nanjing Audit University, China
11:30-11:45	BD3028	Jin Wang	Department of Mathematics Valdosta State University, USA
11:45-12:00	BD3029	Pierre-Richard Cornely	College of Science and Mathematics Valdosta State University, USA

Paper Details

Paper ID	Title & Authors
BD3008	A data-driven government response analysis to COVID-19 in Delta variant stage based on FCM-DID model Ruibing Wu, Johnston Hong-Chung Wong and Xiaoling Peng

BD3007	A Dynamic Evaluation Model for Global Port Production Based on AIS Big Data Li Wang and Ji-shuang Zhu
BD3021	Exploratory Data Analysis & Data Mining on NBA Match Prediction Yuheng Yao
BD4009	Exploring the Depths of Bluetooth Attacks: A Critical Analysis of Bluetooth Exploitation and Awareness of Users Eric Blancaflor, Patrick Miguel G. Purificacion, Reever Brendan Atienza, Jeremey Joshua M. Yao and David Anton C. Alvarez
BD3017	DARPA Electronics Resurgence Initiative 2.0 Program Layout in Fiscal Year 2024 Weiwei Li, Xingwen Suo, Li Cheng, Lu Sun, Guotong Geng and Bin Xue
BD3016	Optimizing Privacy and Convenience in the Sharing Economy: A Blockchain and Multi-Agent Framework Jinyu Zhang, Yumeng Yang, Yisheng Pan and Zhilong Zhu
BD3028	Data-Driven Decisions: Exploring the Impact of Data Mining in Healthcare Jin Wang and Pierre-Richard Cornely
BD3029	Advancing Earthquake Prediction: A Comprehensive Review of Data Science Techniques Jin Wang and Pierre-Richard Cornely