

The 16th International Conference on Computer Science and its Applications (CSA 2024)

December 18-20, 2024
Pattaya, Thailand

Organized by

KCIA

Conferences

**The 10th World Congress on Information Technology Applications and Services
(World IT Congress 2025)**

- February 17-19, 2025, Jeju, South Korea
- <http://www.worlditcongress.org2025/>

**The 19th International Conference on Multimedia and Ubiquitous Engineering
(MUE 2025)**

- April 23-25 2025, Hunan, China
- <http://www.mue-conference.org/2025/>

**The 19th International Conference on Future Information Technology
(FutureTech 2025)**

- April 23-25 2025, Hunan, China
- <http://www.futuretech-conference.org/2025/>

**The International Conference on Big data, IoT, and Cloud computing
(BIC 2025)**

- Aug 13-15, 2025, Phnom Penh, Cambodia
- <http://www.bic-conference.org/2025/>

**The 17th International Conference on Computer Science and its Applications
(CSA 2025)**

- Dec 18-20, 2025
- <http://www.csa-conference.org/2025/>

Message from the CSA 2024 General Chair

International Conference on Computer Science and its Applications (CSA 2024) is the 16th event of the series of international scientific conference. This conference takes place Pattaya, Thailand, December 18 - 20, 2024. CSA 2024 will be the most comprehensive conference focused on the various aspects of advances in computer science and its applications. CSA 2024 will provide an opportunity for academic and industry professionals to discuss the latest issues and progress in the area of CSA. In addition, the conference will publish high quality papers which are closely related to the various theories and practical applications in CSA. Furthermore, we expect that the conference and its publications will be a trigger for further related research and technology improvements in this important subject. CSA 2024 is the next event in a series of highly successful International Conference on Computer Science and its Applications, previously held as CSA 2023(15th Edition: Nha Trang, Vietnam, 2023), CSA 2022(14th Edition: Vientiane, Laos, 2022), CSA 2021(13th Edition: Jeju, Korea, 2021), CSA 2020 (12th Edition: Jeju, Korea, 2020), CSA 2019 (11th Edition: Macau, China), CSA 2018 (10th Edition: Kuala Lumpur, Malaysia), CSA 2017 (9th Edition: Taichung, Taiwan), CSA 2016 (8th Edition: Bangkok, Thailand, 2016), CSA 2015 (7th Edition: Cebu, December, 2015), CSA 2014 (6th Edition: Guam, December, 2014), CSA 2013 (5th Edition: Danang, December, 2013), CSA 2012 (4th Edition: Jeju, November, 2012), CSA 2011 (3rd Edition: Jeju, December, 2011), CSA 2009 (2nd Edition: Jeju, December, 2009), and CSA 2008 (1st Edition: Australia, October, 2008).

The papers included in the proceedings cover the following topics: Mobile and ubiquitous computing, Dependable, reliable and autonomic computing, Security and trust management, Multimedia systems and services, Networking and communications, Database and data mining, Game and software engineering, Grid and scalable computing, Embedded system and software, Artificial intelligence, Distributed and parallel algorithms, Web and internet computing and IT policy and business management.

Accepted and presented papers highlight new trends and challenges of Computer Science and its Applications. The presenters showed how new research could lead to novel and innovative applications. 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.

We would like to give my special thanks to Prof. James J. (Jong Hyuk) Park, Prof. Young-Sik Jeong, Prof. Nammee Moon, Prof. Yi Pan, Prof. Vincenzo Loia, Prof. Stefanos Gritzalis, Prof. Han-Chieh Chao and Prof. Byeong-Seok Shin the Steering Committee Chairs of CSA for their strong encouragement and guidance to organize the symposium. We would like to thank CSA Program Chairs: Prof. Ji Su Park, Prof. Yan Li, Prof. S. Vimal, Prof. Alireza Souri, Prof. Le Anh Ngoc, Prof. Neil Yen and Prof. Jin Wang. We would like to express special thanks to committee members for their timely unlimited support.

CSA 2024 General Chair

Jungho Kang, Baewha Woman University, Korea
Kim-Kwang Raymond Choo, The University of Texas at San Antonio, USA
Changhao Piao, Chongqing University of Posts and Telecommunications, China
David Camacho, Universidad Politécnica de Madrid Madrid, Spain

Message from the CSA 2024 Program Chairs

Welcome to the 16th International Conference on Computer Science and its Applications (CSA 2024) which will be held in Pattaya, Thailand, December 18 - 20, 2024. CSA 2024 will be the most comprehensive conference focused on the various aspects of advances in computer science and its applications.

CSA 2024 provides an opportunity for academic and industry professionals to discuss the latest issues and progress in the area of Computer Science. In addition, the conference contains high quality papers which are closely related to the various theories and practical applications in Computer Science. Furthermore, we expect that the conference and its publications will be a trigger for further related research and technology improvements in this important subject. CSA 2024 is the next event in a series of highly successful International Conference on Computer Science and its Applications, previously held as CSA 2023(15th Edition: Nha Trang, Vietnam, 2023), CSA 2022(14th Edition: Vientiane, Laos, 2022), CSA 2021(13th Edition: Jeju, Korea, 2021), CSA 2020 (12th Edition: Jeju, Korea, 2020), CSA 2019 (11th Edition: Macau, China), CSA 2018 (10th Edition: Kuala Lumpur, Malaysia), CSA 2017 (9th Edition: Taichung, Taiwan), CSA 2016 (8th Edition: Bangkok, Thailand, 2016), CSA 2015 (7th Edition: Cebu, December, 2015), CSA 2014 (6th Edition: Guam, December, 2014), CSA 2013 (5th Edition: Danang, December, 2013), CSA 2012 (4th Edition: Jeju, November, 2012), CSA 2011 (3rd Edition: Jeju, December, 2011), CSA 2009 (2nd Edition: Jeju, December, 2009), and CSA 2008 (1st Edition: Australia, October, 2008).

CSA 2024 contains high quality research papers submitted by researchers from all over the world. Each submitted paper was peer-reviewed by reviewers who are experts in the subject area of the paper. Based on the review results, the Program Committee accepted papers.

For organizing an International Conference, the support and help of many people is needed. First, we would like to thank all authors for submitting their papers. We also appreciate the support from program committee members and reviewers who carried out the most difficult work of carefully evaluating the submitted papers.

We would like to give my special thanks to Prof. James J. (Jong Hyuk) Park, Prof. Young-Sik Jeong, Prof. Nammee Moon, Prof. Yi Pan, Prof. Vincenzo Loia, Prof. Stefanos Gritzalis, Prof. Han-Chieh Chao and Prof. Byeong-Seok Shin the Steering Committee Chairs of CSA for their strong encouragement and guidance to organize the symposium. We would like to thank CSA 2024 General Chairs: Prof. Jungho Kang, Prof. Kim-Kwang Raymond Choo and Prof. Piao Changhao and Prof. David Camacho. We would like to express special thanks to committee members for their timely unlimited support.

CSA 2024 Program Chairs

Ji Su Park, Jeonju University, Korea
Yan Li, Inha University, Korea
S. Vimal, Ramco Institute of Technology, India
Alireza Souri, Islamic Azad University, Iran
Le Anh Ngoc, Swinburne University of Technology, Vietnam
Neil Yen, University of Aizu, Japan
Jin Wang, Hunan University of Science & Technology, China

Organization

Honorary Chair

Doo-Soon Park, Soonchunhyang University, Korea

Steering Committee

James J. Park, SeoulTech, Korea (Leading Chair)
Young-Sik Jeong, Dongguk University, Korea (Co-Chair)
Nammee Moon, Hoseo University, Korea
Yi Pan, GSU, USA and SIAT, China
Vincenzo Loia, University of Salerno, Italy
Stefanos Gritzalis, University of Piraeus, Greece
Han-Chieh Chao, National Ilan University, Taiwan
Byeong-Seok Shin, Inha University, Korea

General Chairs

Jungho Kang, Baewha Women's University, Korea
Kim-Kwang Raymond Choo, The University of Texas at San Antonio, USA
Changhao Piao, Chongqing University of Posts and Telecommunications, China
David Camacho, Universidad Politécnica de Madrid Madrid, Spain

Program Chairs

Ji Su Park, Jeonju University, Korea
Yan Li, Inha University, Korea
S. Vimal, Ramco Institute of Technology, India
Alireza Souri, Islamic Azad University, Iran
Le Anh Ngoc, Swinburne University of Technology, Vietnam
Neil Yen, University of Aizu, Japan
Jin Wang, Hunan University of Science & Technology, China

International Advisory Committee

Mo-Yuen Chow, North Carolina State University, USA
Ka Lok Man, Xi'an Jiaotong-Liverpool University, China
Shu-Ching Chen, Florida International University, USA
Mohammad S. Obaidat, Monmouth University, USA
Enrique Herrera-Viedma, University of Granada, Spain
Hang-Bae Chang, Chung-Ang University, Korea
Sherali Zeadally, University of Kentucky, USA
Jordi Mongay Batalla, National Institute of Telecommunications, Poland
Wanlei Zhou, Deakin University, Australia
Sethuraman Panchanathan, Arizona State University, USA
Yueh-Min Huang, National Cheng Kung University, Taiwan
Byoungsoo Koh, KOCCA(Korea Creative Content Agency), Korea
Junren Shi, Chongqing University of Posts and Telecommunications, China
Kuan-Ching Li, Providence University, Taiwan
Jeong Nyeo Kim, ETRI(Electronics and Telecommunications Research Institute), Korea

Workshop Chairs

Michael Hwa Young Jeong, Kyung Hee University, Korea
Neil Y. Yen, The University of Aizu, Japan
Hyuk-Jun Kwon, Soonchunhyang University, Korea
Se Dong Min, Soonchunhyang University, Korea
Sheng Miao, Qingdao University of Technology, China

Publicity Chairs

Arun Kumar Sangaiah, VIT University, India
Shailendra Rathore, Abertay University, UK
Kwang-il Hwang, Incheon National University, Korea
Fei Hao, Shaanxi Normal University, China
Min Choi, Chungbuk National University, Korea
Hyuk Joon Kwon, Soonchunhyang University, Korea
Jinho Park, Soongsil University, Korea
Pradip Kumar Sharma, University of Aberdeen, UK
Mingjie Liu, Changan Co.,Ltd, China
Chunyun Fu, Chongqing University, China
Yongsheng Wang, Tsinghua University, China
Dexu Bu, Tsinghua University, China
Xiang Jiang, Chongqing jiaotong university, China
Li Lu, Chongqing University, China
Chao Jiang, Chongqing Technology and Business University, China
Qian Zhang, Wuhan University of Technology, China
Bing Zhang, Xinxiang University, China
Sushil Kumar Singh, Marwadi University, India
Ping Liu, Chongqing University of Posts and Telecommunications, China
Hyeonjoon Moon, Sejong University, Korea
Yoo-jae Won, Chungnam National University, Korea

Industrial Cooperation Chairs

Sung Chul Yu, Ssangyong Information & Communications Corp, Korea
Yong Woo Lee, Ssangyong Information & Communications Corp, Korea
Sung Gil Kim, WOOJOO TELECOM, Korea
Bong Sang Seo, ALL4LAND co.,LTD, Korea
Se Jong Kim, SJ Info & Communications CO., LTD, Korea
Tae Yoon Kwon, Neighbor system co.,Ltd , Korea
Han Su Cheon, Selim TSG Co.,Ltd , Korea
Eun Young Kim, TWOY SYSTEMS, Korea
Hwangseop Kim, GENESIS Technologies, Korea
Mihyeon Kim, OSCO, Korea
Jeonghui Gwak, KI&T, Korea
yuncheol Kim, TRACOM, Korea
Seogu Choi, Daebo Communication & Systems Co., Ltd, Korea
Gyeongjin Jeon, JIN INFRA, Korea
Jaejin Lee, Neighbor system co.,Ltd , Korea

Local Arrangement Chairs

Deok-Gyu Lee, Seowon University, Korea
Joon-Min Gil, Jeju National University, Korea

Program Committee

Chang Wu Yu, Chung Hua University, Taiwan
Chia-Hung Yeh, National Sun Yat-sen University, Taiwan
Chin-Fu Kuo, The National Kaohsiung University, Taiwan
Cho-Chin Lin, National Yilan University, Taiwan
Dion Hoe-Lian Goh, Nanyang Technological University, Singapore
El-Sayed El-Alfy, King Fahd University of Petroleum and Minerals, Saudi Arabia
Jehn-Ruey Jiang, National Central University, Taiwan
Qian Yu, University of Regina, Canada
Alok Desai, Brigham Young University, USA
Ivanova Malinka, Technical University of Sofia, Bulgaria
Agostino Marengo, University of Study of Bari, Italy
Ahmed EL Oualkadi, Abdelmalek Essaadi University, Morocco
Hiroyuki Tomiyama, Nagoya University, Japan
Jinmook Kim, Sun Moon University, Korea
Martinez Juan, Gran Mariscal de Ayacucho University, Venezuela
Morales M. Dominguez, University of Seville, Spain
Nader F. Mir, San Jose State University, USA
Pereira Ana Isabel, Polytechnic Institute of Braganca, Portugal
Somchai Chatvichienchai, University of Nagasaki, Japan
Yeongwook Yang, Hanshin University, Korea
Eunseok Lee, Yuhan University, Korea
Koojoo Kwon, Baewha Women's University, Korea
Deok Gyu Lee, Seowon University, Korea
Jihoon Kang, Korea University, Korea
Hyun Woo Kim, Dongguk University, Korea
Jong Beom Lim, Pyeongtaek University, Korea
Yeong-Seok Seo, Yeungnam University, Korea
Ki Yong Lee, Sookmyung Women's University, Korea
Jong Hyuk Lee, Daegu Catholic University, Korea

Invited Speaker 1



Towards Efficient and Scalable RDMA Networking for Datacenters

Prof. Jin Wang

School of Computer Science and Engineering,
Hunan University of Science and Technology, Hunan, China

Abstract:

As datacenters continue to scale and evolve, the demand for high-performance, low-latency networking solutions has become increasingly critical. Remote Direct Memory Access (RDMA) technology has emerged as a key enabler for achieving these performance goals, offering direct memory access from the memory of one computer into that of another without involving either one's operating system. In this keynote, we will explore the latest advancements in RDMA networking, focusing on efficiency and scalability in large-scale datacenter deployments. We will discuss the fundamental principles of RDMA technology and its benefits over traditional networking approaches, including reduced latency, increased throughput, and lower CPU utilization. Key challenges in implementing RDMA at scale, such as congestion control, fault tolerance, and interoperability with existing network infrastructure, will be addressed. Attendees will gain insights into practical deployment considerations, real-world case studies, and performance benchmarking results that demonstrate the tangible benefits of RDMA in large-scale datacenter applications. By the end of this keynote, participants will have a comprehensive understanding of how to leverage RDMA technology to build efficient, scalable, and high-performance networking infrastructures capable of meeting the demands of next-generation datacenters.

Biography:

Dr. Jin Wang (IET Fellow; IEEE Senior Member) is a professor in School of Computer Science and Engineering at Hunan University of Science and Technology. He received the M.S. degree from Nanjing University of Posts and Telecommunications, China in 2005. He received Ph.D. degree from Kyung Hee University Korea in 2010. His research interests mainly include wireless ad hoc and sensor network, datacenter network, network performance analysis and optimization etc. He has published more than 200 international journal and conference papers, such as IEEE TSMC, IEEE TII, IEEE IoTJ, IEEE Wireless Communications, IEEE Systems Journal etc., including more than 20 highly cited papers. He is the Highly Cited Researcher in the world (Clarivate), the Highly Cited Scholar in China (Elsevier) as well as the World's Top 2% Scientist.

Invited Speaker 2



Secure IoT-driven Smart City: Futuristic Next Generation Technologies using Advanced Communication

Dr. Sushil Kumar Singh

Associate Professor,
Department of Computer Engineering,
Marwadi University, Rajkot, Gujrat, India
UCS Lab Leader (Ex.), SeoulTech, South Korea

Abstract:

In the rapidly evolving landscape of metropolitan development, Smart Cities stand at the forefront of technological invention, promising enhanced quality of life through advanced connectivity and intelligent infrastructure. State-of-the-art advanced communication technologies, including the upcoming 6G networks, promise to deliver outstanding speeds, ultra-reliable low latency, and tremendous connectivity, marking a significant leap from its predecessor, 5G. This next-generation network technology will enable unprecedented data transfer rates and connectivity, facilitating the seamless integration of millions of IoT sensor devices across intelligent city infrastructures. However, with the proliferation of connected devices and data flows, security concerns become essential. This keynote lecture explores the critical importance of robust cybersecurity measures to protect sensitive data and ensure the resilience of smart city systems against cyber threats. We will examine state-of-the-art security protocols and technologies, including blockchain, AI-driven threat detection, digital twin-based virtual environment, and end-to-end encryption, essential to protecting the integrity of smart city operations and the security measures required to protect smart city infrastructures from cyber threats. The convergence of these technologies will not only enhance operational efficiency but also immensely improve the quality of life for city inhabitants.

Biography:

Dr. Sushil Kumar Singh (Member, IEEE) is an Associate Professor in the Department of Computer Engineering at Marwadi University, Rajkot, India. He received Ph.D. degree from Seoul National University of Science and Technology, Seoul, South Korea. He received M.Tech. Degree in Computer Science and Engineering from Uttarakhand Technical University, Dehradun, India. He also received an M.E. degree in Information Technology from Karnataka State University, Mysore, India. He has also been the lab leader of the UCS Lab at the Department of Computer Science Engineering, Seoul National University of Science and Technology, Seoul, South Korea. He has received the Best Lab Leadership Award from UCS Lab for 2019-2021. He has more than 12 years of experience teaching in the field of computer science. He has published Four Books: Computer C Programming, Cyber Security, Big Data Analytics, and Mobile Computing. He has also published many high-quality papers (Q1, Top 10% JCR Rank) in international journals and conferences. He has already delivered

international lectures in many countries. His research interests include Blockchain, Artificial Intelligence, Big Data, Internet of Things, Smart City Security, and Cyber-Physical Systems. He is an Associate/ Guest Editor in the Human-centric Computation and Information Sciences (HCIS) Journal, IEEE Journal of Biomedical and Health Informatics (IEEE JBHI) Journal, IGI Global Publication, and Wiley Scrivener Publication. He is a reviewer of the IEEE Wireless Communication Magazine, IEEE SYSTEMS, IEEE Internet of Things, FGCS, TETT, EXSY, JISA, Computer Network, MDPI, CIE, HCIS, JIPS, Computing (COMP), Multimedia Tools & Applications, and SCIS Journal. He also organizes the Research Activities Club, which promotes quality research activities among young researchers at Marwadi University, Rajkot, Gujarat, India.

Invited Speaker 3



Key Technology of Connected Remote Valet Parking

Prof. Changhao Piao

Chief Scientist of Chinese Ministry of Science and Technology,
College of Automation Engineering,
Chongqing University of Posts and Telecommunications, 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. Changhao Piao (Chief Scientist of Chinese Ministry of Science and Technology) is a professor in College of Automation Engineering, Chongqing University of Posts and Telecommunications (CQUPT). He received Ph.D. degree from INHA University, Korea in 2006. His research interests mainly include intelligent vehicles, electric vehicles etc. He has published more than 50 international journal, such as IEEE TII, Journal of Energy Storage etc. As a Chief Scientist of Chinese Ministry of Science and Technology, he are leading a National key R&D program.

PROGRAM SCHEDULE FOR CSA 2024

Day 1, December 18, 2024				
Time	Min	HALL A	HALL B	HALL C
08:40-09:00	20	Registration		
09:00-10:20	80	Session A-1 CSA Chair: Joon-Min Gil	Session B-1 CSA Chair: Deok-Gyu Lee	Session C-1 CSA Chair: Ji Su Park
10:20-10:30	10	Coffee Break		
10:30-11:50	80	Session A-2 CSA Chair: Mingjie Liu	Session B-2 CSA Chair: Ping Liu	Session C-2 BWW Workshop Chair: Se Dong Min
11:50-13:10	80	Lunch		
13:10-15:20	80	Session A-3 CSA Chair: Sheng Miao	Session B-3 CAABE Workshop Chair: Yan Li	Session C-3 BWW Workshop Chair: Se Dong Min
15:20-15:30	10	Coffee Break		
15:30-16:50	80	Session A-4 CSA Chair: Jin Gon Shon	Session B-4 CAABE Workshop Chair: You Li	Session C-4 BWW Workshop Chair: Se Dong Min
16:50-18:00	70	Break		
18:00-18:40	40	Keynote Speaker Chair: Kwang-il Hwang		
18:40-20:00	80	Banquet Chair: Kwang-il Hwang		

Day 2, December 19, 2024			
Time	Min	HALL A	HALL B
08:40-09:00	20	Registration	
09:00-10:40	100	Session A-1 CSA Chair: Yan Li	Session B-1 CAABE Workshop Chair: Sheng Miao
10:40-10:50	10	Coffee Break	
10:50-12:30	100	Session A-2 BWW Workshop Chair: Se Dong Min	Session B-2 CAABE Workshop Chair: Sheng Miao
12:30-13:30	60	Break	
13:30-15:00	90	Local Arrangement Committee Meeting 1	
15:00-15:30	30	Break	
15:30-17:00	90	Organizing Committee Meeting 1	

Day 3, December 20, 2024			
Time	Min	HALL A	
09:30-11:00	90	Organizing Committee Meeting 2	
11:00-12:30	90	Local Arrangement Committee Meeting 2	

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 7/10 laptops running the Adobe Reader and Microsoft Office for paper presentations will be prepared. Please prepare for your presentation.
4. For Q&A in the online section, please email the author.
5. Committee Meeting Only invited members may attend.

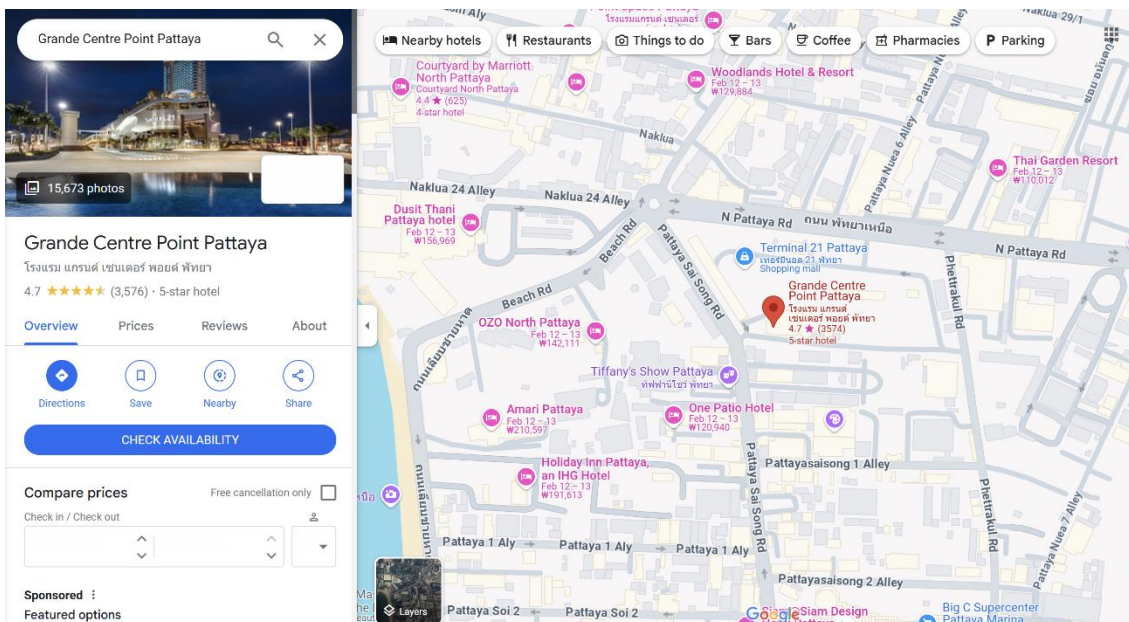
Conference Venue

Grande Centre Point Pattaya

- Grande Centre Point Pattaya
- 456 Moo.6 Na Kluea, Bang Lamung, Chonburi 20150, Thailand
- Hotel TEL +66 33 168 999 / FAX: +66 33 168 900
- Site: <https://www.grandecentrepointpattaya.com/>



How to get into Grande Centre Point Pattaya?



- **Private Car**

- 1. From Suvarnabhumi International Airport (BKK)**

- Approximately 1:30 hrs., 120 km: By the Bangkok – Chonburi – Pattaya Motorway (Highway No.7). Follow signs for Route 3/ Pattaya Nua. Turn right onto Route 3. Turn left onto Pattaya North road. Take Pattaya North road and Grande Centre Point Pattaya will be on the left.

- 2. From Don Muang International Airport (DMK)**

- Approximately 2 hrs., 160 km: By Don Muang Toll Way. Take Sirat Expressway and Continue onto the Bangkok – Chonburi – Pattaya Motorway (Highway No.7). Follow signs for Route 3/ Pattaya Nua. Turn right onto Route 3. Turn left onto Pattaya North road. Take Pattaya North road and Grande Centre Point Pattaya will be on the left.

- 3. From U-Tapao Pattaya International Airport (UTP)**

- Approximately 1 hrs., 50 km: Take the Highway 331. Continue onto Route 36. Continue onto Highway No.7 Follow signs for Route 3/ Pattaya Nua. Turn right onto Route 3. Turn left onto Pattaya North road. Take Pattaya North road and Grande Centre Point Pattaya will be on the left.

- **Bus**

- 1. From Bangkok**

- Take the bus from Northern Bus Terminal (Morchit 2), Eastern Bus Terminal (Ekamai) and New Southern Bus Terminal (Sai Tai) to Pattaya Bus Terminal.

- 2. From Pattaya Bus Terminal located at Pattaya North.**

- Head west through Pattaya North road about 20 minutes by walk (1.5 km) or 5 minutes by public transportation, Grande Centre Point Pattaya is on the left

Banquet

Grande Centre Point Pattaya

- Grande Centre Point Pattaya
- 456 Moo.6 Na Kluea, Bang Lamung, Chonburi 20150, Thailand
- Hotel TEL +66 33 168 999 / FAX: +66 33 168 900
- Site: <https://www.grandcentrepointpattaya.com/>

