

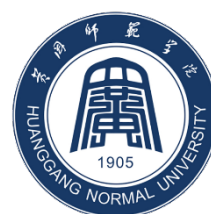
# 第七届计算机科学与信息工程国际会议

7th International Conference on Computer Science and Information  
Engineering (ICCSIE2022)

## 会议手册

### Conference Program

First Version



腾讯线上会议

VooV (Online) Meeting

2022年9月23日

September 23, 2022

# 大会简介 Introduction

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受疫情影响，原定于 2022 年 9 月 23 日-25 日在澳大利亚布里斯班召开的第七届计算机科学与信息工程国际会议(ICCSIE2022)将调整为 2022 年 9 月 23 日在线上召开。本届会议由北京工业大学、国际应用科学与技术协会(IAAST)主办，武汉工程大学、黄冈师范学院协办。本届大会将邀请国内外高校、研究机构、政府部门及企事业单位的相关专家、学者莅临参会，并通过特邀报告、论文汇报的形式就计算机科学与信息工程领域中的最新学术进展和热点问题进行深入探讨，进一步推动相关领域的学术交流。

Due to the epidemic situation, the 7th International Conference on Computer Science and Information Engineering (ICCSIE2022), which was originally planned to be held in Brisbane, Australia during September 23-25, 2022, **will be adjusted to online mode on September 23, 2022.**

ICCSIE2022 is organized by Beijing University of Technology, International Association of Applied Science and Technology (IAAST), Wuhan Institute of Technology and Huanggang Normal University. It aims to discuss the academic frontiers and hot issues of computer science and information engineering, and promote academic exchanges in related fields as well. This conference provides opportunities for the delegates to exchange new ideas and application experiences, to establish business or research relations and to find global partners for future collaboration.

# 大会组织机构

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## 主办单位:

北京工业大学

国际应用科学与技术协会(IAAST)

## 协办单位:

武汉工程大学

黄冈师范学院

## 大会主席:

何泾沙, 教授, 北京工业大学, 中国

张煜东, 教授, 莱斯特大学, 英国

## 共同主席:

Ji Zhang, 教授, 南昆士兰大学, 澳大利亚

Jerry Chun-Wei Lin, 教授, 西挪威应用科技大学, 挪威

Chien-Ming Chen, 副教授, 山东科技大学, 中国

## 技术程序委员会:

Anca Delia Jurcut, University College Dublin, Ireland

Biplob Ray, Deakin University, Australia

Danilo Avola, Sapienza University of Rome, Italy

Farzin Asadi, Kocaeli University, Turkey

Gaoxi Xiao, Nanyang Technological University, Singapore

Gorka Urbikain Pelayo, Universidad País Vasco, Spain

Harish Kumar Sahoo, IIIT Bhubaneswar, Govt. University, India

Hongfei Zhu, Chongqing University of Posts and Telecommunications, China

Kuan Yew Wong, Universiti Teknologi Malaysia, Malaysia

Lavika Goel, Birla Institute of Technology Science, India  
Nameer N. EL-Emam, Philadelphia University, Amman, Jordan  
Ngoc Quang Nguyen, Waseda University, Japan  
Olga Shabalina, Volgograd State technical University, Russia  
Pooja Singh, VJTI, Mumbai, India  
Przemyslaw Falkowski-Gilski, Gdansk University of Technology, Poland  
Ravipudi Venkata Rao, S. V. National Institute of Technology, India  
Reza Rahimi, Cloud Storage Lab, Huawei Innovation Center, USA  
S. SMYS, Information Technology Karpagam College of Engineering, India  
Siddhartha Bhattacharyya, RCC Institute of Information Technology, India  
Ștefan Țălu, The Technical University of Cluj-Napoca, Romania  
Sulayman K. Sowe, National Institute of Information and Communications Technology,  
Japan  
Wei-Chang Yeh, National Tsing Hua University, Taiwan, China  
Wenlan Qiu, University of Houston, USA  
Xiangyu Wang, Curtin University, Australia  
Yongqiang Zhao, Northwestern Polytechnical University, China  
Yongqing Zhu, Singapore University of Social Sciences, Singapore  
Young Seob Jeong, Korea Advanced Institute of Science and Technology, Korea  
Yusri Yusof, Universiti Tun Hussein Onn Malaysia, Malaysia  
Zhenghao Shi, Xi'an University of Technology, China  
Zhuxing Yang, National Cheng Kung University, Taiwan, China  
Guosong Jiang, Huanggang Normal University, China  
Yurong Guan, Huanggang Normal University, China

# ICCSIE2022 Organization

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## Organized by

Beijing University of Technology

International Association of Applied Science and Technology (IAAST)

Wuhan Institute of Technology

Huanggang Normal University

## General Chairs

Jingsha He, Professor, Beijing University of Technology, China

Yu-Dong Zhang, Professor, University of Leicester, UK

## Co-Chairs

Ji Zhang, Professor, University of Southern Queensland, Australia

Jerry Chun-Wei Lin, Professor, Western Norway University of Applied Sciences, Norway

Chien-Ming Chen, Associate Professor, Shandong University of Science and Technology, China

## Technical Program Committee Members

Anca Delia Jurcut, University College Dublin, Ireland

Biplob Ray, Deakin University, Australia

Danilo Avola, Sapienza University of Rome, Italy

Farzin Asadi, Kocaeli University, Turkey

Gaoxi Xiao, Nanyang Technological University, Singapore

Gorka Urbikain Pelayo, Universidad País Vasco, Spain

Harish Kumar Sahoo, IIIT Bhubaneswar, Govt. University, India

Hongfei Zhu, Chongqing University of Posts and Telecommunications, China

Kuan Yew Wong, Universiti Teknologi Malaysia, Malaysia

Lavika Goel, Birla Institute of Technology Science, India

Nameer N. EL-Emam, Philadelphia University, Amman, Jordan

Ngoc Quang Nguyen, Waseda University, Japan

Olga Shabalina, Volgograd State technical University, Russia  
Pooja Singh, VJTI, Mumbai, India  
Przemyslaw Falkowski-Gilski, Gdansk University of Technology, Poland  
Ravipudi Venkata Rao, S. V. National Institute of Technology, India  
Reza Rahimi, Cloud Storage Lab, Huawei Innovation Center, USA  
S. SMYS, Information Technology Karpagam College of Engineering, India  
Siddhartha Bhattacharyya, RCC Institute of Information Technology, India  
Ștefan Țălu, The Technical University of Cluj-Napoca, Romania  
Sulayman K. Sowe, National Institute of Information and Communications Technology,  
Japan  
Wei-Chang Yeh, National Tsing Hua University, Taiwan, China  
Wenlan Qiu, University of Houston, USA  
Xiangyu Wang, Curtin University, Australia  
Yongqiang Zhao, Northwestern Polytechnical University, China  
Yongqing Zhu, Singapore University of Social Sciences, Singapore  
Young Seob Jeong, Korea Advanced Institute of Science and Technology, Korea  
Yusri Yusof, Universiti Tun Hussein Onn Malaysia, Malaysia  
Zhenghao Shi, Xi'an University of Technology, China  
Zhuxing Yang, National Cheng Kung University, Taiwan, China  
Guosong Jiang, Huanggang Normal University, China  
Yurong Guan, Huanggang Normal University, China

# 会议议程

## ICCSIE2022 日程安排终稿

日期	时间	事项
9月23日 星期五上午	会议主题: ICCSIE2022  会议时间: 2022/09/23 09:00-18:00 (GMT+08:00) 中国标准时间-北京  点击链接入会或添加至会议列表: <a href="https://meeting.tencent.com/dm/kHKMn7afbnBY">https://meeting.tencent.com/dm/kHKMn7afbnBY</a>  腾讯会议 ID: 582-321-640	
	09:00-09:10	欢迎辞
	<b>主讲报告</b>	
	09:10-12:00	Anand Nayyar, Assistant Professor, Duy Tan University, Vietnam
		Yu-Dong Zhang, Professor, University of Leicester, UK
		Gautam Srivastava, Associate Professor, Brandon University, Canada
Ngoc Quang Nguyen, Assistant Professor, Waseda University, Japan		
Daniilo Avola, Assistant Professor, Sapienza University of Rome, Italy		
9月23日 星期五下午	<b>学术论文汇报</b>	
	14:00-18:00	A20220913101688、A20220819815397、A20220819420695、 A20220811902725、A20220811709650、A20220811687452、 A20220809986948、A20220806273764、A20220808769376、 A20220805613799、A20220805179001、A20220803201989、 A20220803984177、A20220802430361、A20220728548638、 A20220728399620、A20220728211504、A20220725763526、 A20220721176165、A20220721408757、A20220715423614、 A20220713121305、A20220712243865、A20220629996911、 A20220517114309、1220220513111465、CC512292、IP19567、 A20220914342636

# Conference Program

## ICCSIE2022 Conference Program

日期	时间	事项
Sep. 23, 2022 Friday	TOPIC: ICCSIE2022 TIME: 2022/09/23 09:00-18:00 (GMT+08:00) Beijing Time Click the link below, or add it to your conference list: <a href="https://meeting.tencent.com/dm/kHKMn7afbnBY">https://meeting.tencent.com/dm/kHKMn7afbnBY</a> Conference ID: 582-321-640 <b>Attention: please download the VOOV Meeting and test whether it can be used normally in advance.</b>	
	9:00-9:10	Welcome speech
	<b>Keynote Speeches</b>	
	09:10-12:00	Anand Nayyar, Assistant Professor, Duy Tan University, Vietnam
		Yu-Dong Zhang, Professor, University of Leicester, UK
		Gautam Srivastava, Associate Professor, Brandon University, Canada
Ngoc Quang Nguyen, Assistant Professor, Waseda University, Japan		
Daniilo Avola, Assistant Professor, Sapienza University of Rome, Italy		
Sep. 23, 2022 Friday	<b>Oral Presentation of Accepted Papers</b>	
	14:00-18:00	A20220913101688、 A20220819815397、 A20220819420695、 A20220811902725、 A20220811709650、 A20220811687452、 A20220809986948、 A20220806273764、 A20220808769376、 A20220805613799、 A20220805179001、 A20220803201989、 A20220803984177、 A20220802430361、 A20220728548638、 A20220728399620、 A20220728211504、 A20220725763526、 A20220721176165、 A20220721408757、 A20220715423614、 A20220713121305、 A20220712243865、 A20220629996911、 A20220517114309、 1220220513111465、 CC512292、 IP19567、 A20220914342636