2024. 10.12.-









Conference Second Announcement

In the age of big data, machine learning technology has been effectively utilized in various fields such as image processing, genomics, engineering computing, macroeconomic forecasting, and medical diagnosis. However, despite its success, applying data-driven computing and machine learning in engineering analytics still presents many unresolved challenges. With the aim of promoting research and the application of big data analysis, data-driven computing, and artificial intelligence in engineering, as well as fostering scientific communications among scientists, practitioners and engineers from related fields, the first International Conference on Data-Driven Computing and Machine Learning in Engineering (DACOMA) conference was held in 2019 in Shanghai, China and was hosted by Tongji University, with Prof. Hehua Zhu and Prof. Timon Rabczuk as its chairs. The second DACOMA conference was hosted by Tsinghua University in 2022, with Prof. Zhanli Liu and Prof. Xiaoying Zhuang as its chairs. The third DACOMA conference was hosted by Beijing Institute of Technology in 2023, with Prof. Pengwan Chen, Prof. Zhanli Liu and Prof. Xiaoying Zhuang as its chairs.

The fourth International Conference on Data-Driven Computing and Machine Learning in Engineering (DACOMA-24) will be held in Nanjing, Jiangsu Province, China, from 12-14 October, 2024. DACOMA-24 will be hosted by Hohai University, and jointly organized by Leibniz University Hannover, Tongji University, Bauhaus University Weimar, Tsinghua University, Beijing Institute of Technology, German Association of Computational Mechanics, CSTAM Working Party on Computational Mechanics and Jiangsu Society of Theoretical and Applied Mechanics. The conference will be held with Prof. Hongwu Tang from Hohai University,

Prof. Timon Rabczuk from Bauhaus University Weimar and Prof. Hehua Zhu from Tongji University serving as the conference chairs. This year's conference will continue to focus on machine learning and AI in general for relevant topics in Engineering and Science.

We sincerely invite experts, colleagues, and students in the fields of data-driven computational mechanics and machine learning to participate in the conference. We are looking forward to seeing you in Nanjing. We believe that you will enjoy the wide variety of activities of the DACOMA-24, as well as your stay in this elegant city.

Organized by: Hohai University

Leibniz University Hannover

Tongji University

Bauhaus University Weimar

Tsinghua University

Beijing Institute of Technology

German Association of Computational Mechanics

CSTAM Working Party on Computational Mechanics

Jiangsu Society of Theoretical and Applied Mechanics

Supporting Agency: College of Mechanics and Engineering Science, Hohai

University

Key Laboratory of Coastal Disaster and Protection (Hohai

University), Ministry of Education

Jiangsu Society of Theoretical and Applied Mechanics

Ongoing update...

Conference Venue: Hohai University, Gulou District, Nanjing, China

Conference Date: 12-14 October, 2024 (On-site Registration, 12 October)

Conference Website: www.dacoma.org.cn

Conference Organization

1. Conference Chairs (in alphabetical order by surname)







Timon Rabczuk (Germany) Hongwu Tang (China)

Hehua Zhu (China)

2. Executive Chairs (in alphabetical order by surname)

Zhuojia Fu (China)

Dong Lei (China)

Xiaoying Zhuang (China)

3. Session Chairs (in alphabetical order by surname)

Elena Atroshchenko (Australian) Yan Gu (China) Ji Lin (China)

Zhanli Liu (China) Guofei Pang (China) Huilong Ren (China)

Jing Xie (China) Hongguang Sun (China) Wenxiang Xu (China)

Shuwei Zhou (China) Navid Valizadeh (Germany) Binh Huy Nguyen (Belgium)

Ongoing update...

4. International Scientific Advisory Committee (in alphabetical order by surname)

Wanlin Guo (China) Klaus Hackl (Germany) Nguyen-Xuan Hung (Vietnam)

Shaofan Li (China) Wing Kam Liu (USA) Peter Wriggers (Germany)

Weiya Xu (China) Qing Zhang (China) Tongyi Zhang (China)

George Z.H. Zhu (Canada) Ongoing update...

5. Academic Committee (in alphabetical order by surname)

Chairmen

Xu Guo (China) Zhuo Zhuang (China)

Members

Pengwan Chen (China) Wenqi Ding (China) Zongliang Du (China)

Zhuojia Fu (China) Wanlin Guo (China) Xiaofan Gou (China)

Xu Guo (China) Peng Hao (China) Heng Hu (China)

Yabin Jin (China) Xiaomo Jiang (China) Xiaoning Jiang (USA) Qianhua Kan (China) Dong Lei (China) Fang Liu (China) Gang Li (China) Xiaojun Li (China) Yanping Lian (China) Yijun Liu (China) Zhanli Liu (China) Yi Liu (China) Xinzheng Lu (China) Timon Rabczuk (Germany) Huilong Ren (China) Zhongkui Sun (China) Shan Tang (China) Shaoqiang Tang (China) Cheng Wang (China) Lihua Wang (China) Jun Yan (China) Qingsheng Yang (China) Hongling Ye (China) Yong Yuan (China) Weisheng Zhang (China) Wengang Zhang (China) Xiaoying Zhuang (China) Xu Zhang (China) Yiming Zhang (China) Zhuo Zhuang (China) Ongoing update...

6. Local Advisory Committee (in alphabetical order by surname)

Chengbin Du (China) Xiaofan Gou (China) Dan Huang (China)

Tiantang Yu (China) Deshun Yin (China) Ongoing update...

7. Local Organizing Committee (in alphabetical order by surname)

Xing Cao (China) Hanshu Chen (China) Zhuojia Fu (China) Jintao He (China) Jun Kong (China) Dong Lei (China) Ji Lin (China) Junpu Li (China) Zhiyuan Ma (China) Timon Rabczuk (Germany) Jiabin Song (China) Huaizhi Su (China) Xing Wei (China) Xuan Wu (China) Qiang Xi (China) Xiaoying Zhuang (China) Ongoing update...

Topics

The topics of DACOMA-24, including but not restricted to

- 1. Dynamic Data-Driven Computing
- 2. Uncertainty Analysis of Geomechanical Model
- 3. Data-Driven Engineering Applications
- 4. Data-Driven Constitutive Models
- 5. Machine Learning-Based Solution for Partial Differential Equations
- 6. Machine Learning-Based Image Reconstruction of Materials
- 7. Machine Learning-Based Metamaterials and Advanced Materials Design
- 8. Data-Driven Techniques in Multiscale and Multiphysics Simulations
- 9. Visualization and Analysis of Multi-source Data
- 10. Big Data Design and Optimization
- 11. Data-Driven Simulation Techniques
- 12. Machine Learning for Materials Characterization
- 13. Data-Driven Techniques for Continuous and Discrete Methods
- 14. High Performance Data Processing

Important Dates

- Hotel Reservation Deadline: 25 September, 2024
- Early-Bird Registration: **Before 15 August, 2024**
- Regular Registration: From 16 August, 2024 to 30 September, 2024
- Late and On-Site Registration: After 1 October, 2024
- DACOMA-24 Conference Date: 12-14 October, 2024

Plenary Speakers (in alphabetical order by surname)



Professor Wanlin GuoNanjing University of
Aeronautics and Astronautics



Professor Xu GuoDalian University of
Technology



Professor Klaus Hackl Ruhr University Bochum



Professor George Z.H. ZhuYork University



Professor Hehua ZhuTongji University



Professor Zhuo ZhuangTsinghua University

Ongoing update...

Registration Fee and Payment option

Registration Type	Early-Bird Registration (Before 15 August, 2024)	Regular Registration (From 16 August, 2024 to 30 September, 2024)	Late and On-Site Registration (After 1 October, 2024)
Full Delegate	2000 CNY or 280 USD	2300 CNY or 320 USD	2500 CNY or 350 USD
Student Delegate	1000 CNY or 140 USD	1200 CNY or 170 USD	1400 CNY or 200 USD

The full payment of registration fee covers: access to all technical sessions, refreshment breaks, banquet, lunch & supper, and one copy of the conference material. The registration fee does not include insurance for the participants regarding accidents, sickness or loss of personal property. It is advisable that participants make their own arrangements in respect of health and travel insurance before leaving their countries. Three payment options are supported: **OR code payment**, **transfer remittance (USD)** and **on-site payment**.

■ For <u>OR code payment</u>, please send the payment record (student delegate are required to provide student certificate) to Dr. Chen (chenhanshu@hhu.edu.cn).

QR code:



For <u>payment by transfer (USD)</u>, please be sure to indicate payment information (DACOMA2024+Name) in the remittance message, and send the bank transfer relevant (student delegate are required to provide student certificate) to Dr. Chen (chenhanshu@hhu.edu.cn).

Overseas participants remitting information in USD:

BENEFICIARY'S BANK: China construction bank, Jiangsu branch, Xinjiekou subbranch

BENEFICIARY'S A/C NO: 32050159403600004026

BENEFICIARY'S NAME: Jiangsu Society of Theoretical and Applied Mechanics

BENEFICIARY'S ADDRESS IN CHINA OR TELEPHONE NUMBER: No. 1 Xikang

Road, Nanjing, Jiangsu Province. 0086-025-83786951

SWIFT CODE: PCBCCNBJJSX

上述为美元账户,人民币转账请联系宋老师 (jslxxh@163.com)。

- For on-site payment, POS machine is supported.
- For <u>Payment receiver</u>: The conference organizer has entrusted Jiangsu Society of Theoretical and Applied Mechanics (JSTAM) to collect the fees for registration and publication from authors. JSTAM is also entrusted to provide invoices for these payments to authors.

Hotel

Room Type	Agreement Price
Superior King Size Bed Room (Single Breakfast)	380 CNY per night
Superior Twin Bed Room (Double Breakfast)	440 CNY per night
Deluxe King Size Bed Room (Single Breakfast)	490 CNY per night

The conference will be held at Hohai University. A conference agreement price is provided for the <u>Junheng Hotel Nanjing</u>. For hotel reservation, please send your hotel booking information (Appendix) to Dr. Xi (xiqiang1994@126.com). Since hotel rooms are very limited, an earlier booking is highly encouraged.

Visa Application

Dr. Ma (zhiyuan.ma@hhu.edu.cn) will offer the certification to help you getting the visa to attend the conference in Nanjing, China.

Contact Information

Qiang Xi Hanshu Chen

Hohai University Hohai University

Email: xiqiang1994@126.com Email: chenhanshu@hhu.edu.cn

Tel: 18251820705 Tel: 18056361731

Jintao He Zhiyuan Ma

Hohai University Hohai University

Tel: 15950550037 Tel: 18151675782

Conference Instructions

会议服务指南

1. Conference Hotel 会议酒店

南京隽恒酒店(南京鼓楼区西康路1号)

Nanjing Junheng Hotel (No.1 Xikang Road, Gulou District, Nanjing)



酒店外景(Hotel Exterior)



酒店房间(Hotel Room)



酒店餐厅(Hotel Restaurant)



酒店夜景(Hotel Night View)

2. Conference Venue 会场

河海大学闻天馆(江苏省南京市西康路1号,河海大学)

Wen Tian Guan, Hohai University (No.1 Xikang Road, Hohai University, Nanjing, Jiangsu Province)





河海大学闻天馆(Wen Tian Guan, Hohai University)



酒店到会场路线 (From Conference Hotel to Science and Art Center)

从酒店到会场约600米,步行10分钟。

About 600 meters from the hotel to the venue, a 10 minute walk.

3. Transportation 交通路线

(1) 从南京禄口国际机场到隽恒酒店(会议酒店)

From Nanjing Lukou International Airport to Junheng Hotel (Conference Hotel)

A: 乘坐出租车(约90元,50分钟)

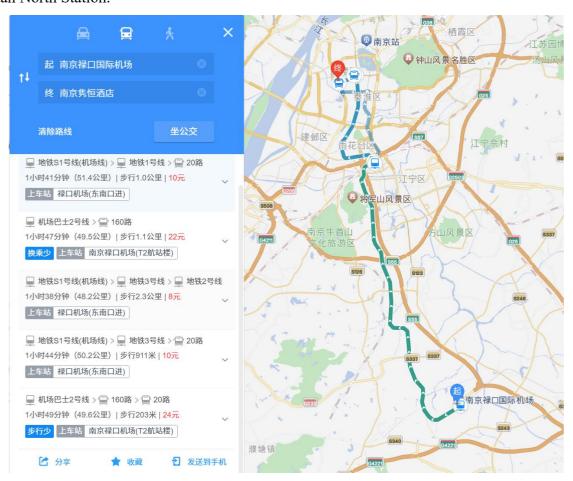
Taxi: about 90 yuan, 50 minutes

B: 乘坐地铁(约 10 元, 1 小时 40 分钟)

Metro: about 10 yuan, 1 hour and 40 minutes

在禄口地铁站上车乘坐 S1 号线(去往南京南站方向),在南京南站地铁站转 1 号线 (八卦洲大桥南方向),在鼓楼地铁站下车 6 号出口出站,在鼓楼公园公交站乘坐 20 路公交车,在虎踞关北站下车。

Take Line S1 (heading towards Nanjingnan Railway Station) at Lukou Metro Station, transfer to Line 1 (heading south of Baguazhou Bridge) at Nanjingnan Railway Station, get off at Exit 6 at Gulou Metro Station, take Bus No. 20 at Gulou Park Bus Station, and get off at Huju Guan North Station.



机场到酒店路线(Airport to Hotel Route)

(2) 从南京南站到隽恒酒店(会议酒店)

From Nanjingnan Railway Station to Junheng Hotel (Conference Hotel)

A: 乘坐出租车(约 40 元, 30 分钟)

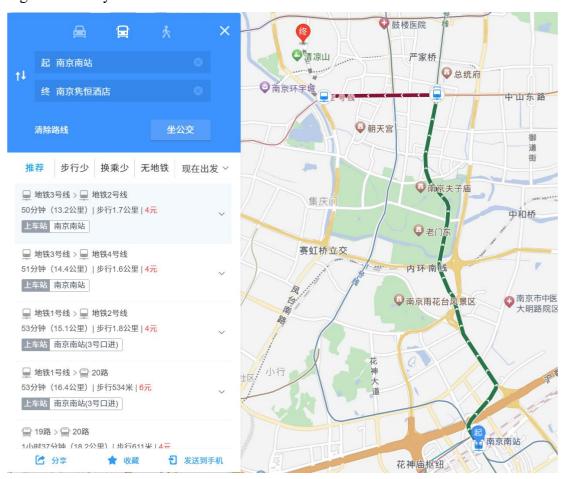
Taxi: about 40 yuan, 30 minutes

B: 乘坐地铁(约 4 元, 50 分钟)

Metro: about 4 yuan, 50 minutes

在南京南站地铁站上车乘坐3号线(去往林场方向),在大行宫地铁站转2号线(鱼嘴方向),在汉中门地铁站站下车2号出口出站。

Take Line 3 (towards Linchang direction) at Nanjingnan Railway Station Subway Station, transfer to Line 2 (towards Yuzui direction) at Daxinggong Subway Station, and get off at Hanzhongmen Subway Station at Exit 2 to exit.



南京南站到酒店路线(Nanjingnan Railway Station to Hotel Route)

(3) 从南京站到隽恒酒店(会议酒店)

From Nanjing Station to Junheng Hotel (Conference Hotel)

A: 乘坐出租车(约 20 元, 22 分钟)

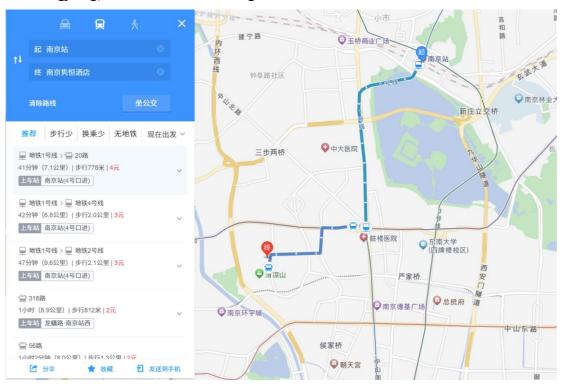
Taxi: about 20 yuan, 25 minutes

B: 乘坐地铁(约 3 元, 40 分钟)

Metro: about 3 yuan, 40 minutes

在南京站地铁站上车乘坐1号线(去往中国药科大学方向),在鼓楼地铁站转4号线(龙江方向),在云南路地铁站站下车1号出口出站。

Take Line 1 (towards China Pharmaceutical University) at Nanjing Station, transfer to Line 4 (towards Longjiang) at Gulou Station, and get off at Yunnan Road Station. Exit at Exit 1.



南京站到酒店路线(Nanjing Station to Hotel Route)

International Conference on Data-Driven Computing and Machine Learning in Engineering 2024 (DACOMA2024)
12-14 October 2024, Nanjing, China

Appendix

Name		
Institution		
Phone Number		
Contact Email		
Registration Type	□Full Delegate □Student Delegate	
Room Type		
Check-in Date		
Check-out Date		
Special Requirement		

12-14 October 2024, Nanjing, China

Paper Title (14 Pt Arial, Bold, Centered)

Author name¹, Author name^{2,*}, Author name³, and Author name⁴

¹ College of Mechanics and Engineering Science, Hohai University, Nanjing 211100, China.

² Affiliation, address

³Affiliation, address

⁴Affiliation, address

*Corresponding author's email: dacoma2024@hhu.edu.cn

ABSTRACT

All abstracts and papers must be presented in English, should not exceed 500 words, and must fit on this single page along with the other information required for this page. The first page includes only the title, authorship, contact information, abstract, and keywords. Please put "(corresponding author)" behind the contact information of the corresponding author as shown above. Email addresses are optional but encouraged for the corresponding author. Authors that have the same affiliation can be listed on the same line. The paper introduction section will start on the second page. Do not add page numbers. The abstract and paper as defined here must be submitted in its final form; it will appear in the proceedings as submitted without significant alteration. All authors must check it carefully before submitting it. Papers will only be included in the final proceedings if at least one of the authors participates and presents the paper at DACOMA2024.

All content must be approved for open/unrestricted distribution.

Keywords: International, Conference, DACOMA, Nanjing