



香 港 大 學 THE UNIVER<u>SITY OF HONG KONG</u>

首屆智慧遙感製圖國際研討會

The 1st International Workshop on Remote Sensing Intelligent Mapping (RSIM)



識別二維碼 查看會議手冊 Scan the QR code to view the workshop handbook 29・11・2024 - 01・12・2024 中國・香港 China・Hong Kong



頁 Page

- 2 會議背景 Background
- 3 會議概況 Program Overview
- 3-4 日程安排 Program Arrangement
- 4 會議組織委員會 Organizing Committee
- 5 酒店推薦 Hotel Recommendation
- 6-9 11月30日會議概況及日程安排 30 November Program Overview & Arrangement
- 10-14 12月1日會議概況及日程安排 1 December Program Overview & Arrangement
- 15-26 主旨和引導報告人 Keynote & Invited Speakers
- 27-28 校園地圖 University Map
- 29-30 餐飲地圖 Catering Map



會議流程 Program Rundown

主辦單位 ORGANIZERS





承辦單位 HOSTS







DEPARTMENT OF GEOGRAPHY THE UNIVERSITY OF HONG KONG





THE UNIVERSITY OF HONG KONG Urban Systems Institute 香港大學城市系統研究院



Institute for Climate and Carbon Neutrality THE UNIVERSITY OF HONG KONG

會議背景 Background

隨著地球大數據和遙感技術的迅速發展,遙感製圖技術已廣泛應用於自 然生態環境監測、農業森林資源調查、城市規劃與管理,以及社會經濟 度量等眾多領域。智慧遙感製圖,作為遙感數據處理分析、科學發現與 綜合應用的新起點,融合了人工智能、雲計算、大數據分析與多學科領 域知識,旨在提升遙感信息提取、變化探測、應用研究水平和全球環境 問題的應對能力。

本次研討會以"眾智賦能遙感創新與學科交叉"為主題,旨在探討智慧 遙感製圖在理論框架、技術方法及專題應用等方面的最新進展和未來趨 勢,以期促進"遙感+"的多學科融合,並推動跨學科間的深入協作。 我們誠邀國內外專家學者及青年學生積極參加,通過本次會議促進遙感 製圖領域難點的眾智探討以及不同領域間的深入對話,共同推動智慧遙 感製圖的創新與發展。

As Big Earth data and remote sensing technologies rapidly evolve, remote sensing mapping techniques are now extensively applied in a wide range of areas including ecological environment monitoring, agricultural and forestry resource surveys, urban planning and management, as well as socioeconomic metrics. Remote Sensing Intelligent Mapping (RSIM), a new frontier for data processing, scientific discovery, and comprehensive applications, integrates artificial intelligence, cloud computing, big data analysis, and multidisciplinary knowledge to enhance the in-depth level of remote sensing information extraction, change detection, applications, and the capability to address global environmental issues.

This international workshop is themed "Crowd Intelligence Empowering Remote Sensing Innovation & Interdisciplinary Collaboration", and aims to explore the latest advancements and future trends in intelligent remote sensing mapping, covering theoretical frameworks, technological methods, and specialized applications. The goal is to promote interdisciplinary integration under the "Remote Sensing +" initiative and to foster deep collaboration among various disciplines.

We cordially invite global experts, scholars, and students to actively participate. This workshop will facilitate crowd-intelligence discussions on the challenges in the field of remote sensing mapping and deepen dialogues across different fields, collectively advance the innovation and application of intelligent remote sensing mapping technology, and strengthen interdisciplinary cooperation and development.



會議主題: THEME:	眾智賦能遙感創新與學科交叉 Crowd Intelligence Empowering Remote Sensing Innovation & Interdisciplinary Collaboration
主辦單位:	香港大學 The University of Hong Kong
ORGANIZERS:	清華大學 Tsinghua University
會議時間:	2024年11月29日 - 12月1日
DATE:	November 29 – December 1, 2024



11月29日:	登記及報到
November 29:	Registration and Check-in
	香港大學 百周年校園
09:00-18:00	賽馬會教學樓 10樓 地理系
	Department of Geography, 10F, The Jockey Club Tower,
	Centennial Campus,
	The University of Hong Kong

會議組織委員會 Organizing Committee

科學指導委員會主席 Scientific committee Chair: 徐冠華 Guanhua XU (Ministry of Science and Technology of the People's Republic of China)

會議聯合主席 Organizing committee Co-chairs: 徐冰 Bing XU (Tsinghua University) 周宇宇 Yuyu ZHOU (The University of Hong Kong)

會議副主席 Vice-chairs: 白玉琪 Yuqi BAI (Tsinghua University) 王傑 Jie WANG (Pengcheng Laboratory) 黃華兵 Huabing HUANG (Sun Yat-sen University)

會議秘書處 Secretariat: 陳斌 Bin CHEN (The University of Hong Kong) 張鴻生 Hongsheng ZHANG (The University of Hong Kong) 吳錦 Jin WU (The University of Hong Kong) 俞樂 Le YU (Tsinghua University)



11月30日及 12月1日: November 30 & December 1: 會議 Workshop

香港大學 學生發展及資源中心 莊月明文化中心 5樓 月明劇院

Yuet Ming Auditorium, 5F, Chong Yuet Ming Cultural Centre, Centre of Development and Resources for Students, The University of Hong Kong



JEN香港酒店 JEN Hong Kong by Shangri-La 508 Queen's Rd W, Sai Wan, Hong Kong

181酒店及服務式住宅 One-Eight-One Hotel & Serviced Residences 167 Connaught Rd W, Sai Ying Pun, Hong Kong

香港萬怡酒店 Courtyard by Marriott Hong Kong

181 Connaught Rd W, Sai Wan, Hong Kong

華美達海景酒店 Ramada Hong Kong Harbour View

39 Queen's Road West, Hong Kong

華大盛品酒店

Best Western Plus Hotel Hong Kong

308, Des Voeux Road West, Hong Kong

11月30日會議概況及日程安排 30 November Program Overview & Arrangement

香港大學 學生發展及資源中心 莊月明文化中心 5樓 月明劇院 Yuet Ming Auditorium, 5F, Chong Yuet Ming Cultural Centre, Centre of Development and Resources for Students, The University of Hong Kong

Time	Events		
08:30-09:00	Check-in		
09:00-09:10	Welcoming remarks & Group Photo	Bing Xu	Tsinghua University
Keynote Ses Venue: Yuet	sion (Chair: Bing Xu) Ming Auditorium, SF, Chong Yust Ming Cultural Centre		
09:10-09:30	Progress on intelligent quantitative remote sensing theory and methods (智慧化定量遙感理論與方法的研究進展)	Jianya Gong	Wuhan University
09:30-09:50	Keynote: Machine learning-based global distributions of key leaf photosynthetic parameters	Jingming Chen	University of Toronto
09:50-10:10	Keynote: Indirect Mapping	Peng Gong	The University of Hong Kong
10:10-10:30	Coffee Break		

Session 1a: Development of Remote Sensing Mapping Theory and Global Surface Mapping Applications (Organizers: Peng Gong, Liangyun Liu, Shihong Du)

10:30-10:55#	Weakly Supervised High-Resolution Land Cover Mapping	Liangpei Zhang	Wuhan University
10:55-11:10*	Mapping global land cover from static to dynamic: method, progress and perspective	Liangyun Liu	Chinese Academy of Sciences
11:10-11:25*	Sensing biodiversity with intelligence	Tiejun Wang	University of Twente
11:25-11:40*	3-meter resolution urban land cover mapping of China	Xidong Chen	The University of Hong Kong
11:40-11:50	Conditional Gaussian Enhanced Dense Correlation Matching for Cross-Category Land Cover Classification	Huan Ni	Nanjing University of Information Science & Technology
11:50-12:00	Leveraging past information and machine learning to accelerate land disturbance monitoring	Su Ye	Zhejiang University
12:00-12:10	Entity-based image analysis: A new strategy to map geographic entities	Xiaolin Zhu	The Hong Kong Polytechnic University
12:10-12:20	Near-daily monitoring of surface water dynamics using Gaofen-6, Landsat, and Sentinel-2 data with weakly supervised learning	Shuang Chen	The University of Hong Kong
Session 2a: A	Artificial Intelligence and Remote Sensing Foundational Models		
(Organizers:	Yu Liu, Haohuan Fu)		
Venue: MWT	5 1/F, Meng Wah Complex		
10:30-10:55#	Some reflections on remote sensing foundational models	Yu Liu	Peking University
10:55-11:10*	Brain-Inspired 3D Visual Localization: From Point Clouds to Deep Geospatial Representation	Cheng Wang	Xiamen University
11:10-11:20	UrBench: A Comprehensive Benchmark for Evaluating Large Multimodal Models in Multi-View Urban Scenarios	Weijia Li	Sun Yat-sen University
11:20-11:30	Smart remote sensing: concept and perspectives	Guangjian Yan	Beijing Normal University
11:30-11:40	The Synergy between Remote Sensing and Social Sensing in Urban Studies	Xiaoyue Xing	The University of Hong Kong
11:40-11:50	A ² -MAE: A Spatial-temporal-spectral Unified Remote Sensing Pre- training Method Based on Anchor-aware Masked Autoencoder	Lixian Zhang	National Supercomputing Center in Shenzhen
11:40-11:50 11:50-12:00	A ² -MAE: A Spatial-temporal-spectral Unified Remote Sensing Pre- training Method Based on Anchor-aware Masked Autoencoder Multimodal Semantic Segmentation Network Trained with Improved LoRA of Foundation Model	Lixian Zhang Jiahua Xu	National Supercomputing Center in Shenzhen Wuyi University
11:40-11:50 11:50-12:00 12:00-12:10	A ² -MAE: A Spatial-temporal-spectral Unified Remote Sensing Pre- training Method Based on Anchor-aware Masked Autoencoder Multimodal Semantic Segmentation Network Trained with Improved LoRA of Foundation Model Boosting Change Captioning in Remote Sensing through Data Augmentation and Diffusion Models	Lixian Zhang Jiahua Xu Xiaofei Yu	National Supercomputing Center in Shenzhen Wuyi University Beijing Foreign Studies University

Session 1b: Development of Remote Sensing Mapping Theory and Global Surface Mapping Applications (Organizers: Peng Gong, Liangyun Liu, Shihong Du)

	ming Addition and, on only Fact ming Sattaria Sentre		
13:40-13:55*	Mapping Sustainable Urban Human Settlement at Community Levels	Shihong Du	Peking University
13:55-14:10*	FROM-GLC Plus v3: in time land change mapping with multi-mode and dense surface observation	Le Yu	Tsinghua University
14:10-14:20	Impact of Vegetation Change Patterns in Old Urban Areas, New Urban Areas, and Suburban Areas on Urban Heat Island Intensity in Chinese Cities	Wenjie Zhang	Nanjing University of Information Science & Technology
14:20-14:30	MMGR: A Multi-modal Contrastive Learning method for Multiple Geographic Mapping Tasks with VHR Images and POIs	Lubin Bai	Peking University
14:30-14:40	A novel Greenness and Water Content Composite Index (GWCCI) for soybean mapping from single remotely sensed multispectral images	Hui Chen	Institute of Agricultural Resources and Regional Planning. CAAS
14:40-14:50	An Automatic Extraction Method for Large-Scale and High- Resolution Impervious Surface Area	Nan Wang	East China University of Technology
14:50-15:00	Daily global wetland dynamics derived from global seemless data cubes with deep learning	Shuai Yuan	The University of Hong Kong
15:00-15:10	HQTP30: Error-Reduced Digital Elevation Model of the Qinghai- Tibet Plateau using ICESat-2 and Fusion Model	Xingang Zhang	Nanjing University
Session 2b: A (Organizers: Venue: MWT	Artificial Intelligence and Remote Sensing Foundational Models Yu Liu, Haohuan Fu) 5 1 /F, Meng Wah Complex		
13:40-13:55*	Vector Building Mapping from Remote Sensing Images	Guisong Xia	Wuhan University
13:55-14:10*	When Spatio-Temporal Data Meet Large Language Models	Yuxuan Liang	Hong Kong University of Science and Technology (Guangzhou)
14:10-14:25*	Generative Remote Sensing Foundation Model and Its Applications	Xiangyong Cao	Xi'an Jiaotong University
14:25-14:35	Intelligent landslide interpretation and susceptibility evaluation in western Sichuan based on deep learning models	Rui Zhang	Southwest Jiaotong University
14:35-14:45	Learning Global Land Cover Mapping Through a 38 Million-Core Scalable Weakly-Supervised Method	Juepeng Zheng	Sun Yat-sen University
14:45-14:55	Accurate segmentation and functional recognition of urban mixed land use from remote sensing data using convolutional neural networks	Xuyang Chen	Southeast University
14:55-15:05	User-centric Remote Sensing Analysis (URSA): Towards the future of remote sensing applications	Zhelun Sun	Tsinghua University
15:05-15:15	LHRS-Bot: Empowering Remote Sensing with VGI-Enhanced Large Multimodal Language Model	Dilixiati Muhataer	Nanjing University
15:15-15:25	An intelligent learning reconfiguration model based on transformer and CNN combined multi-source features for high- precision DEM void filling	Tengfei Zhang	Wuhan University
15:20-15:40	Coffee Break		

Session 3a. L (Organizers: Venue: Yugt	Jrban Remote Sensing: Multidimensional Information Extractior Peijun Du, Huanfeng Shen) Ming Auditorium, 5F, Chong Yuet Ming Cultural Centre	and Precis	ion Mapping
15:40-16:05#	High-dynamic sensing of urban thermal environments based on spatio-temporal fusion	Huanfeng Shen	Wuhan University
16:05-16:20*	A novel deep learning framework to extract individual tree height at the urban scale	Qingyan Meng	Chinese Academy of Sciences
16:20-16:35*	Intelligent interpretation of high-resolution urban remote sensing scenes	Qiqi Zhu	China University of Geosciences (Wuhan)
16:35-16:45	Exploring the local spatial morphological configuration pattern of the thermal environment in built-up area	Jie Chen	Central South University
16:45-16:55	Fine-grained building attribute mapping from Street-view and Satellite Imagery	Weijia Li	Sun Yat-sen University
16:55-17:05	Global urban environmental monitoring using multi-source satellite observations	Xuecao Li	China Agricultural University
17:05-17:15	Mapping 3D Tree Structure for New York City Environment Using Multi-source Remote Sensing	Qin Ma	Nanjing Normal University
17:15-17:25	A rapidly update mapping method for High-resolution global impervious surface area (Hi-GISA) product	Zhong- chang Sun	International Research Center of Big Data for Sustainable Development Goals (CBAS)
17:25-17:35	Exploring the Application of GEDI in Urban Building Heights Mapping at Fine-grained and 150-m Scales	Guang Zheng	Nanjing University
Session 4a: E Detection (O Venue: MWT	Ecological Environment and Agricultural Remote Sensing: Inforr Irganizers: Yongshuo Fu, Zhenzhong Zeng) 5 1 /F, Meng Weh Complex	nation Extra	ction and Change
15:40-16:05#	Mapping of Vegetation in China Based on Remote Sensing and Crowdsourced Data	Qinghua Guo	Peking University
16:05-16:20*	Opportunities and challenges in high-resolution vegetation modeling	Wenjie Fan	Peking University
16:20-16:35*	Climatic Impacts of Land Use Land Cover Change in Africa – Remote sensing and environmental in situ measurements in Taita Hills, Kenya since 2003	Petri Pellikka	University of Helsinki
16:35-16:45*	High-quality soil moisture retrieval by solving vegetation crosstalk issue	Jianxiu Qiu	Sun Yat-sen University
16:45-16:55	Mapping multi-cycle rice phenology using harmonic analysis and time series depolarization index derived from dual-pol Sentinel-1 datasets	Shihua Li	University of Electronic Science and Technology of China
16:55-17:05	How does soil salinization affect crop planting structures?	Miao Lu	The Institute of Agricultural Resources and Regional Planning (IARRP) of the Chinese Academy of Agricultural Sciences (CAAS)
17:05-17:15	A synergistic method for identifying typical maize growing areas with multi-source time-series remote sensing data	Shuangxi Miao	China Agricultural University
17:15-17:25	China Water Cover Mapping and classification	Zhenguo Niu	The Aerospace Information Research Institute (AIR) under the Chinese Academy of Sciences (CAS)
17:25-17:40	When and where soil water supply matters to ecosystem photosynthesis	Jiangong Liu	Columbia University
18:30-20:30	Welcome Dinner		

9 Guiding lecture # Invited lecture *

12月1日會議概況及日程安排 1 December Program Overview & Arrangement

香港大學 學生發展及資源中心 莊月明文化中心 5樓 月明劇院 Yuet Ming Auditorium, 5F, Chong Yuet Ming Cultural Centre, Centre of Development and Resources for Students, The University of Hong Kong

Time	Events		
Keynote Ses Vanue: Yuet	sion (Chair: Yuyu Zhou) Ming Auditorium, SF, Chong Yust Ming Cultural Contre		
09:00-09:20	Keynote: A Potential Physics-informed Deep-Learning Paradigm Exploiting Multi-Satellite Observations for Climate Actions	CK Shum	Ohio State University
09:20-09:40	Keynote: Towards Region Understanding Vision Language Model	Yizhou Yu	The University of Hong Kong
09:40-10:00	Keynote: Agricultural remote sensing for food security	Shunlin Liang	The University of Hong Kong
10:00-10:20	Coffee Break		

Session 3b. l (Organizers:	Jrban Remote Sensing: Multidimensional Information Extraction Peijun Du, Huanfeng Shen)	n and Precis	ion Mapping
venuer ruet	ming Additionum, or, chong rust ming Cultural Centre		
10:20-10:35*	Precise Mapping of Tree Species Based on Hyperspectral Remote Sensing Images: A Case Study	Sen Jia	Shenzhen University
10:35-10:50*	Large-scale and multi-scale land cover/use mapping driven by intelligent computation	Xin Huang	Wuhan University
10:50-11:00	Urban Environment, Exposure, Equality (U3E) with Geospatial Big Data	Bin Chen	The University of Hong Kong
11:00-11:10	Remote Sensing Image Semantic Segmentation based on Key Feature Repairing Self-Supervised Learning	Lianzhi Huo	The Aerospace Information Research Institute (AIR) under the Chinese Academy of Sciences (CAS)
11:10-11:20	Cross-modal Semantic Matching and Change Detection Modeling of Multi-source Remote Sensing Images	Liangzhi Li	Chang'an University
11:20-11:30	Beyond Clouds: Seamless Flood Mapping Using Optical Satellite Image Time Series	Zhiwei Li	The Hong Kong Polytechnic University
11:30-11:40	A Holistic Perspective on Global Urban Expansion and Shrinkage: A 3D Spatiotemporal Analysis Using Advanced Remote Sensing Techniques	Wu Xiao	Zhejiang University
11:40-11:50	Automatic classification of desert-oasis vegetation types based on random forest	Hua Xu	The Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences
11:50-12:00	Nighttime Lights Reveals Substantial Spatial Heterogeneity and Inequality in Post-hurricane Recovery	Qiming Zheng	The Chinese University of Hong Kong
12:00-12:10	Combining Urban Remote Sensing Multidimensional Information Extraction with a Novel Method for Building Height Estimation	Baihui Huang	The University of Hong Kong
Session 4b: Detection (O	Ecological Environment and Agricultural Remote Sensing: Inform rganizers: Yongshuo Fu, Zhenzhong Zeng)	mation Extra	action and Change
10:20-10:35*	Disentangling Land Use Change Effects on China's Greening from Concurrent Climate Change and Forest Recovery	Zaichun Zhu	Peking University Shenzhen Graduate School
10:35-10:50*	Mapping monthly-scale GPP products across tropical forests based on a leaf-age-dependent EC-LUE model	Xiuzhi Chen	Sun Yat-sen University
10:50-11:00	CFATD: A High-Resolution Time Series of Forest Aboveground Biomass in China (1985–2023)	Yaotong Cai	Sun Yat-sen University
11:00-11:10	A time-series rubber plantation mapping framework considering sample migration, dynamic phenology and change detection features based on archived Landsat images	Yaoliang Chen	Fujian Normal University
11:10-11:20	Global patterns and drivers of tropical aboveground carbon changes	Yu Feng	Eastern Institute of Technology, Ningbo
11:20-11:30	SIF supports the long-term global GPP estimation based on transfer-learning	Xiaobin Guan	Wuhan University
11:30-11:40	Monitoring the Diurnal Dynamics of Vegetation Photosynthesis on Large Scales	Xing Li	Sun Yat-sen University
11:40-11:50	Leveraging Big Remote Sensing Data for Accurate Crop Yield Predictions	Jie Pei	Sun Yat-sen University
12:30-13:30	Lunch Break		

Session 5a: Global Environmental Change and Sustainable Development (Organizers: Xiao Cheng, Yongguang Zhang, Chaoyang Wu) Venue: Yust Ming Auditorium, SF, Chong Yuet Ming Cultural Centre

13:30-13:55#	Global warming and rapid polar environment change	Xiao Cheng	Sun Yat-sen University
13:55-14:10*	Impacts of Permafrost Degradation on Vegetation Dynamics and Carbon Cycle under Climate Change	Chaoyang Wu	The Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences
14:10-14:20	Human-dominated greening in Asian endorheic basins and its implications for sustainable development	Xuanlong Ma	Lanzhou University
14:20-14:30	Global compound extreme weather events and their effects on extreme wildfires	Age Shama	Southwest Jiaotong University
14:30-14:40	A multi-scalar standardized terrestrial water storage drought index to monitor hydrological drought in southeast China	Haijun Deng	Fujian Normal University
14:40-14:50	High-resolution inversion of urban extreme air pollution events based on ground monitoring and remote sensing	Junwei Ding	Southeast University
14:50-15:00	Local temperature impact of urban heat mitigation strategy based on WRF integrating urban canopy parameters and local climate zones	Na Dong	Sun Yat-sen University
15:00-15:10	A global daily seamless 9-km Vegetation Optical Depth (VOD) product from 2010 to 2021	Die Hu	Wuhan University
15:10-15:20	Assessing and Mitigating Health Risks from Traffic-Induced Heat and Pollution: Strategies for Sustainable Urban Development under Global Environmental Change	Aijia Wang	Southeast University
Session 6: Re	emote Sensing and Planetary Health		
(Organizers:	Jun Yang, Lunche Wang) 5 1/5 Mena Wah Complex		
13:30-13:55#	A scaling law for predicting urban trees canopy cooling efficiency	Weiqi Zhou	Chinese Academy of Sciences Ecological and Environmental Research Center
13:30-13:55# 13:55-14:10*	A scaling law for predicting urban trees canopy cooling efficiency Nighttime light remote sensing and urban spatio-temporal information analysis	Weiqi Zhou Bailang Yu	Chinese Academy of Sciences Ecological and Environmental Research Center East China Normal University
13:30-13:55# 13:55-14:10* 14:10-14:25*	A scaling law for predicting urban trees canopy cooling efficiency Nighttime light remote sensing and urban spatio-temporal information analysis Inversion and reconstruction of global-scale atmospheric environment parameters using machine learning	Weiqi Zhou Bailang Yu Qiangqiang Yuan	Chinese Academy of Sciences Ecological and Environmental Research Center East China Normal University Wuhan University
13:30-13:55# 13:55-14:10* 14:10-14:25* 14:25-14:40*	A scaling law for predicting urban trees canopy cooling efficiency Nighttime light remote sensing and urban spatio-temporal information analysis Inversion and reconstruction of global-scale atmospheric environment parameters using machine learning A New Perception of Urban Soundscapes: From Spectrum to Harmonic	Weiqi Zhou Bailang Yu Qiangqiang Yuan Shan Yin	Chinese Academy of Sciences Ecological and Environmental Research Center East China Normal University Wuhan University Shanghai Jiao Tong University
13:30-13:55# 13:55-14:10* 14:10-14:25* 14:25-14:40* 14:40-14:55*	A scaling law for predicting urban trees canopy cooling efficiency Nighttime light remote sensing and urban spatio-temporal information analysis Inversion and reconstruction of global-scale atmospheric environment parameters using machine learning A New Perception of Urban Soundscapes: From Spectrum to Harmonic Planted forests greened 7% slower than natural forests in Southern China over the past forty years	Weiqi Zhou Bailang Yu Qiangqiang Yuan Shan Yin Jia Sun	Chinese Academy of Sciences Ecological and Environmental Research Center East China Normal University Wuhan University Shanghai Jiao Tong University China University of Geosciences
13:30-13:55# 13:55-14:10* 14:10-14:25* 14:25-14:40* 14:40-14:55* 14:55-15:05	A scaling law for predicting urban trees canopy cooling efficiency Nighttime light remote sensing and urban spatio-temporal information analysis Inversion and reconstruction of global-scale atmospheric environment parameters using machine learning A New Perception of Urban Soundscapes: From Spectrum to Harmonic Planted forests greened 7% slower than natural forests in Southern China over the past forty years Integrated data fusion and machine learning for global PM2.5 pollution mapping	Weiqi Zhou Bailang Yu Qiangqiang Yuan Shan Yin Jia Sun Kaixu Bai	Chinese Academy of Sciences Ecological and Environmental Research Center East China Normal University Wuhan University Shanghai Jiao Tong University China University of Geosciences East China Normal University
13:30-13:55# 13:55-14:10* 14:10-14:25* 14:25-14:40* 14:40-14:55* 14:55-15:05 15:05-15:15	A scaling law for predicting urban trees canopy cooling efficiency Nighttime light remote sensing and urban spatio-temporal information analysis Inversion and reconstruction of global-scale atmospheric environment parameters using machine learning A New Perception of Urban Soundscapes: From Spectrum to Harmonic Planted forests greened 7% slower than natural forests in Southern China over the past forty years Integrated data fusion and machine learning for global PM2.5 pollution mapping Satellite observations of drought impacts on land ecosystem carbon uptake	Weiqi Zhou Bailang Yu Qiangqiang Yuan Shan Yin Jia Sun Kaixu Bai Laibao Liu	Chinese Academy of Sciences Ecological and Environmental Research Center East China Normal University Wuhan University Shanghai Jiao Tong University China University of Geosciences East China Normal University The University of Hong Kong
13:30-13:55# 13:55-14:10* 14:10-14:25* 14:25-14:40* 14:40-14:55* 14:55-15:05 15:05-15:15 15:05-15:15	A scaling law for predicting urban trees canopy cooling efficiency Nighttime light remote sensing and urban spatio-temporal information analysis Inversion and reconstruction of global-scale atmospheric environment parameters using machine learning A New Perception of Urban Soundscapes: From Spectrum to Harmonic Planted forests greened 7% slower than natural forests in Southern China over the past forty years Integrated data fusion and machine learning for global PM2.5 pollution mapping Satellite observations of drought impacts on land ecosystem carbon uptake High-quality satellite remote sensing of NOX in support of air pollution and health	Weiqi Zhou Bailang Yu Qiangqiang Yuan Shan Yin Jia Sun Jia Sun Kaixu Bai Laibao Liu Kai Qin	Chinese Academy of Sciences Ecological and Environmental Research CenterEast China Normal UniversityWuhan UniversityShanghai Jiao Tong UniversityChina University of GeosciencesEast China Normal UniversityThe University of Hong KongChina University of Hong Kong
13:30-13:55# 13:55-14:10* 14:10-14:25* 14:25-14:40* 14:40-14:55* 14:55-15:05 15:05-15:15 15:15-15:25 15:15-15:25	A scaling law for predicting urban trees canopy cooling efficiency Nighttime light remote sensing and urban spatio-temporal information analysis Inversion and reconstruction of global-scale atmospheric environment parameters using machine learning A New Perception of Urban Soundscapes: From Spectrum to Harmonic Planted forests greened 7% slower than natural forests in Southern China over the past forty years Integrated data fusion and machine learning for global PM2.5 pollution mapping Satellite observations of drought impacts on land ecosystem carbon uptake High-quality satellite remote sensing of NOX in support of air pollution and health Retrieval of High temporal resolution AOD over Coastal Waters	Weiqi Zhou Bailang Yu Qiangqiang Yuan Shan Yin Jia Sun Jia Sun Kaixu Bai Laibao Liu Kai Qin Yi Wang	Chinese Academy of Sciences Ecological and Environmental Research CenterEast China Normal UniversityWuhan UniversityShanghai Jiao Tong UniversityChina University of GeosciencesEast China Normal UniversityChina University of GeosciencesChina University of GeosciencesChina University of Hong KongChina University of Hong and TechnologyChina University of Geosciences
13:30-13:55# 13:55-14:10* 14:10-14:25* 14:25-14:40* 14:40-14:55* 14:55-15:05 15:05-15:15 15:15-15:25 15:25-15:35 15:35-15:45	A scaling law for predicting urban trees canopy cooling efficiency Nighttime light remote sensing and urban spatio-temporal information analysis Inversion and reconstruction of global-scale atmospheric environment parameters using machine learning A New Perception of Urban Soundscapes: From Spectrum to Harmonic Planted forests greened 7% slower than natural forests in Southern China over the past forty years Integrated data fusion and machine learning for global PM2.5 pollution mapping Satellite observations of drought impacts on land ecosystem carbon uptake High-quality satellite remote sensing of NOX in support of air pollution and health Retrieval of High temporal resolution AOD over Coastal Waters Remote Sensing of Hong Kong's Urban Geological Vulnerability	Weiqi Zhou Bailang Yu Qiangqiang Yuan Shan Yin Jia Sun Kaixu Bai Kai Qin Kai Qin Yi Wang Guoqiang Shi	Chinese Academy of Sciences Ecological and Environmental Research Center East China Normal University Wuhan University Shanghai Jiao Tong University China University of Geosciences East China Normal University The University of Hong Kong China University of dining and Technology China University of Geosciences. Wuhan

Venue: Yuet	Mao Cheng, Yongguang Zhang, Chaoyang Wu) Ming Auditorium, 5F, Chong Yuet Ming Cultural Centre		
16:00-16:15*	Remote sensing of Earth system radiation budget and its spatiotemporal analysis	Tianxing Wang	Sun Yat-sen university
16:15-16:30*	A knowledge-informed machine learning framework for monitoring wetland methane fluxes	Zhen Zhang	Institute of Tibetan Plateau Research, Chinese Academy of Science
16:30-16:40	Using vision language models to map the abrupt thaw of frozen ground at a pan-Arctic scale and estimating the carbon mobility	Lingcao Huang	The Chinese University of Hong Kong
16:40-16:50	Time-series snowmelt detection over the Antarctic using Sentinel-1 SAR images on Google Earth Engine	Lingyi Kong	Aerospace Information Research Institute, Chinese Academy of Sciences
16:50-17:00	Urbanization shapes the global achievement of Sustainable Development Goals with trade-off effects	Yunyu Tian	Beijing Normal University
17:00-17:10	Declining precipitation frequency drives earlier leaf senescence by intensifying drought stress and enhancing drought acclimation	Xiaoyue Wang	Institute of Geographic Sciences and Natural Resources Research, Chinese Academy of Sciences
17:10-17:20	Efficient Adjacent Feature Harmonizer Network with UAV-CD+ Dataset for Remote Sensing Change Detection	Yikui Zhai	Wuyi University
17:20-17:30	Underwater Remote Sensing Monitoring of Moorea Island Coral Reefs: Practices and Research Progress under Global Climate Change	Ming Li	Wuhan University
17:30-17:40	Mapping Industrial Lands across Global Large Cities for Sustainable Urban Development	Cheolhee Yoo	The Hong Kong Polytechnic University
17:40-17:50	Enhanced estimation of potential wildfire behavior characteristics to assess wildfire danger in southwest China using deep learning schemes	Rui Chen	University of Electronic Science and Technology of China
17:50-18:00	Increased precipitation has not enhanced the carbon sequestration of afforestation	Xintao Li	Hohai University
Session 4c: E Detection (O Venue: MWT	cological Environment and Agricultural Remote Sensing: Inforn rganizers: Yongshuo Fu, Zhenzhong Zeng) 5 1/F, Meng Wah Complex	nation Extra	iction and Change
16:00-16:15*	Remote Sensing Applications in Understanding Climate Risk and	Peng Zhu	The University of
10.15 10.20*	Climate Adaptation of Agricultural System		Hong Kong
16:15-16:30"	Climate Adaptation of Agricultural System Scalable mapping of plant functional traits from forest sites to a continental scale	Jin Wu	The University of Hong Kong
16:30-16:40	Climate Adaptation of Agricultural System Scalable mapping of plant functional traits from forest sites to a continental scale Upslope tree expansion would enhance biomass carbon sink potential	Jin Wu Xiaoyi Wang	The University of Hong Kong The Institute of Tibetan Plateau Research, Chinese Academy of Sciences
16:15-16:30 ^{**} 16:30-16:40 16:40-16:50	Climate Adaptation of Agricultural System Scalable mapping of plant functional traits from forest sites to a continental scale Upslope tree expansion would enhance biomass carbon sink potential A feature-optimized and performance-weighted ensemble learning for estimating soil salinity using UAV imagery and soil auxiliary information	Jin Wu Xiaoyi Wang Li Wang	The University of Hong Kong The Institute of Tibetan Plateau Research, Chinese Academy of Sciences Institute of Agricultural Resources and Regional Planning. Chinese Academy of Agricultural Sciences
16:15-16:30 16:30-16:40 16:40-16:50 16:50-17:00	Climate Adaptation of Agricultural System Scalable mapping of plant functional traits from forest sites to a continental scale Upslope tree expansion would enhance biomass carbon sink potential A feature-optimized and performance-weighted ensemble learning for estimating soil salinity using UAV imagery and soil auxiliary information Crop phenology extraction and farmland soil moisture inversion based on dual-polarization SAR imagery	Jin Wu Xiaoyi Wang Li Wang Xin Bao	Hong KongThe University of Hong KongThe Institute of Tibetan Plateau Research, Chinese Academy of SciencesInstitute of Agricultural Resources and Regional Planning. Chinese Academy of Agricultural SciencesSouthwest Jiaotong University
16:13-16:30 16:30-16:40 16:40-16:50 16:50-17:00 17:00-17:10	Climate Adaptation of Agricultural System Scalable mapping of plant functional traits from forest sites to a continental scale Upslope tree expansion would enhance biomass carbon sink potential A feature-optimized and performance-weighted ensemble learning for estimating soil salinity using UAV imagery and soil auxiliary information Crop phenology extraction and farmland soil moisture inversion based on dual-polarization SAR imagery An automated and scalable framework for rice mapping without ground labels in the cloud-prone region with complex cropping patterns	Jin Wu Xiaoyi Wang Li Wang Xin Bao Xingrong Li	The University of Hong Kong The Institute of Tibetan Plateau Research, Chinese Academy of Sciences Institute of Agricultural Resources and Regional Planning. Chinese Academy of Agricultural Sciences Southwest Jiaotong University Nanjing Agricultural University
16:13-16:30 16:30-16:40 16:40-16:50 16:50-17:00 17:00-17:10 17:10-17:20	Climate Adaptation of Agricultural System Scalable mapping of plant functional traits from forest sites to a continental scale Upslope tree expansion would enhance biomass carbon sink potential A feature-optimized and performance-weighted ensemble learning for estimating soil salinity using UAV imagery and soil auxiliary information Crop phenology extraction and farmland soil moisture inversion based on dual-polarization SAR imagery An automated and scalable framework for rice mapping without ground labels in the cloud-prone region with complex cropping patterns Monitoring mangrove species phenology in coastal China based on SuperDove time-series images	Jin Wu Xiaoyi Wang Li Wang Xin Bao Xin Bao Li Yanjun Liu	The University of Hong Kong The Institute of Tibetan Plateau Research, Chinese Academy of Sciences Institute of Agricultural Resources and Regional Planning. Chinese Academy of Agricultural Sciences Southwest Jiaotong University Nanjing Agricultural University Sun Yat-sen university
16:15-16:30** 16:30-16:40 16:40-16:50 16:50-17:00 17:00-17:10 17:10-17:20 17:20-17:30	Climate Adaptation of Agricultural System Scalable mapping of plant functional traits from forest sites to a continental scale Upslope tree expansion would enhance biomass carbon sink potential A feature-optimized and performance-weighted ensemble learning for estimating soil salinity using UAV imagery and soil auxiliary information Crop phenology extraction and farmland soil moisture inversion based on dual-polarization SAR imagery An automated and scalable framework for rice mapping without ground labels in the cloud-prone region with complex cropping patterns Monitoring mangrove species phenology in coastal China based on SuperDove time-series images Orchard mapping and validation over China using multi-source and multi-temporal imagery	Jin Wu Xiaoyi Wang Li Wang Xin Bao Xingrong Li Yanjun Liu Yuanyuan Zhao	The University of Hong Kong The Institute of Tibetan Plateau Research, Chinese Academy of Sciences Institute of Agricultural Resources and Regional Planning. Chinese Academy of Agricultural Sciences Southwest Jiaotong University Nanjing Agricultural University Sun Yat-sen university China Agricultural University

Poster Session

Venue. Sr, chong i ber ming cultural centre		
Exploring the potential of Chinese GF-6 images for crop mapping in regions with complex agricultural landscapes	Qian Song	Chinese Academy of Agricultural Sciences
Modeling and Mapping Urban Evolution Process	Haoyu Wang	Peking University
Exploring land use land cover changes and their effect on urban heat island and land surface temperature: The case of Lahore, Pakistan	Shah Fahad	Beijing Normal University
Spatiotemporal dynamic mapping of heat exposure risk for different populations in city based on hourly multi-source data	Junmao Zhang	Institute of Urban Environment (IUE), Chinese Academy of Sciences (CAS)
Observed nonlinear cooling performance of urban parks: Evidence from a Shenzhen case study	Haoran Tang	The University of Hong Kong
Towards detailed building typology by urban-scale 3D building decomposition	Yijie Wu	The University of Hong Kong
Automated Indoor Pedestrian Networks Reconstruction from As-Built Floorplan Drawings using LLM and YOLO	Longyong Wu	The University of Hong Kong
Local Climate Zone Mapping via Token Clustering Transformer and Residual Network using Multimodal Satellite Images	Xianhua Xia	Wuhan University
Integrating Remote Sensing and Street View Imagery for Urban Functional Zone Change Detection	Chenghan Yang	Nanjing University
Research on Land Use and Land Cover Information Extraction in the Central Yunnan Urban Agglomeration Based on Deep Learning	Xue Ding	Yunnan Normal University
Long-Term Human Footprint Mapping and Future Prediction	Mengqing Geng	China Agricultural University
Projecting 1 km-grid land surface temperature in the context of urbanization and climate change globally from 2025 to 2100	Shirao Liu	China Agricultural University
The 3D building growth doubled the inequality of urban infrastructure in the conterminous United States	Guojiang Yu	China Agricultural University
The significance of soil organic carbon for climate-resilient crop productivity	Yuyang Huang	Zhejiang University
Accuracy Evaluation and Point Cloud Classification of DJI Zenmuse L1 LiDAR	Maofan Sun	Shanghai Jiao Tong University
DS-HyFA-Net: A Deeply Supervised Hybrid Feature Aggregation Network With Multiencoders for Change Detection in High-Resolution Imagery	Tingfeng Xian	Wuyi University
Asymmetrical impact of daytime and nighttime warming on the interannual variation of urban spring vegetation phenology	Peiyi Yin	China Agricultural University
Near-real-time wildfire detection approach with Himawari-8/9 geostationary satellite data integrating multi-scale spatial-temporal feature	Lizhi Zhang	Wuhan University
Spatiotemporal global soil moisture reconstruction based on fast Fourier convolution	Ruyi Yao	Wuhan University
Sustainable Urban Development in the Face of Climate Crisis:A Study on the Dynamic Relationship between CO2 Concentration and Land Surface Temperature in China's Urban Agglomerations	Qiwen Sun	China University of Mining & Technology-Beijing
The potential of phenological and seasonal variation features from satellite-based time-series data for improving forest aboveground carbon density estimates	Yiru Zhang	University of Electronic Science and Technology of China
A vegetation phenology dataset by integrating multiple sources using the Reliability Ensemble Averaging method	Yishuo Cui	***
Variations in Water Clarity of Shenzhen Coastal Area: Observation from Sentinel-2	Yelong Zhao	***
Towards long-term, high-accuracy, and continuous satellite total and fine-mode aerosol records: Enhanced Land Gen-eral Aerosol (e-LaGA) retrieval algorithm	Xin Su	***
Individualized Indicators and Estimation Methods for Tiger Nut Tubers Yield Using Light Multispectral UAV and Lightweight CNN Structure	Dan Li	***
GEEPVNET: Photovoltaic Power Station Mapping using Flexible Deep Learning and Google Earth Engine	Chengkang Zhang	***
Impact of Landform on Spatial-Temporal Distribution and Scenario-Based Prediction of Carbon Stocks in Arid Regions	Keyu Song	***



主旨和引導報告人 (按姓氏排序) Keynote & Invited Speakers (In alphabetical order of surnames)



Jingming Chen is a professor at the College of Geographical Sciences, Fujian Normal University and the Department of Geography and Planning, University of Toronto, Director of the Carbon Neutrality Research Institute of Fujian Normal University, Fellow of the Royal Society of Canada, and concurrently serving as the Director of the Institute of International Earth System Science at Nanjing University. His main research fields are vegetation remote sensing and the carbon-water cycle of terrestrial ecosystems. He has published over 430 SCI papers with a total citation count of over 36,500 and an H-index of 97 (Google Scholar). He is currently the Editor-in-Chief of Remote Sensing of Environment, Associate Editor of JGR-Biogeosciences and Canadian Journal of Remote Sensing, member of the Science Steering Committee of the US Flux Observation Network, member of the Expert Group of the Key Project of Global Change and Response of the Ministry of Science and Technology of China, and member of the Consultative Committee of Overseas Experts of the State Council's Overseas Chinese Affairs Office. Jing Ming Chen is a Professor in the Department of Geography and Planning at the University of Toronto, Canada Research Chair, and Fellow of the Royal Society of Canada. Dr. Chen holds a B.Sc. (1982) from Nanjing Institute of Meteorology in China, and PhD (1986) from Reading University in the United Kingdom. His major research interests include remote sensing of vegetation structure, function and traits, and quantifying carbon and water cycles of terrestrial ecosystems. He has published over 400 papers in refereed journals, which are cited over 19,000 times in the scientific literature (Web of Science).



Professor Xiao Cheng is the Dean of the School of Geospatial Engineering and Science at Sun Yat-sen University, as well as a recipient of the National Science Fund for Distinguished Young Scholars. He is dedicated to research in polar remote sensing and global change, having participated in China's 16th, 22nd, 24th, and 32nd Antarctic scientific expeditions and conducted fieldwork in the Arctic on over ten occasions. He has achieved pioneering and systematic research results in areas such as multifactor, multi-source remote sensing inversion, monitoring, and analysis of change mechanisms in polar cryospheres. He has spearheaded the rapid development and system construction of China's "Polar Eagle" series of remote sensing UAVs, facilitated the launch of China's first polar remote sensing small satellite, "Ice Road," and developed ground processing systems. Additionally, he has led the construction of China's first polar research vessel, "Sun Yat-sen University Polar," promoting the development of a comprehensive observation system for "Polar Air-Sky-Ice-Sea-Submarine." He has published over a hundred papers in domestic and international academic journals and has received numerous honors, including the Beijing Youth "May Fourth Medal" and the title of "Advanced Individual in China's Polar Research."



武漢大學 Wuhan University

Jianya Gong is a member of Chinese Academy of Sciences (CAS). He is now the director of Wuhan University's State Key Lab of Information Sciences in Surveying, Mapping and Remote Sensing. He was born in Zhangshu, Jiangxi Province in April, 1957. He graduated from the Department of Surveying of East China Geosciences Institute in 1982 and received his doctor degree from Wuhan Technical University of Surveying and Mapping in 1992. He was selected as the member of CAS in 2011. He was awarded China National Funds for Distinguished Young Scientists, 973 project chief scientist, academic leader of Innovative Research Groups of China's National Natural Science Foundation, etc. Professor Gong Jianya has made a number of original innovations in geoinformation theory and geometric remote sensing studies. For example, he invented object-oriented data model and interoperability model and geometric imaging model and precise processing method. Based on his own theory and models, he developed independently GIS basic software and network service platform and remote sensing ground processing system. He has undertaken over 30 national and provincial scientific projects. Professor Gong has published 12 works and textbooks, over 430 theses. He won 3 National Science and Technology second prizes, 5 first prizes at provincial and ministerial prizes, 1 ISPRS Dolezal Achievement Award.



Peng Gong is the Vice-President and Pro-Vice-Chancellor (Academic Development), the Chair Professor of Global Sustainable Development and Department of Geography, The University of Hong Kong. He received his PhD degree from the Faculty of Environment at the University of Waterloo, Canada in 1990. He became a tenured professor with the Department of Environmental Science, Policy and Management at the University of California, Berkeley in 1997 and rose to full Professor in 2001. He joined Tsinghua University in 2009 and was the Vice Chairman of the University Academic Committee in 2015. He became the founding Chair of the Department of Earth System Science in 2016 and Dean of the Faculty of Science in 2017 at Tsinghua University. Professor Gong is a Foreign Member of the Academy of Europe (Academia Europaea). He was the Founding Editor-in-Chief of Geographic Information Sciences (now Annals of GIS). He has been appointed as one of the 13 advisers to Future Earth, an organization sponsored by ICSU (International Council for Science), UNEP (United Nations Environment Programme) and UNESCO (United Nations Educational, Scientific and Cultural Organisation), one of the 19 members of the Earth Commission, a group of leading scientists in the world to develop scientific strategies in support of the achievement of sustainable development goals, and one of the 3 co-chairs of the Lancet Climate Change and Health Commission and Countdown 2030. Professor Gong's research interests include global environmental change and public health, technology and society. He was one of the nine Overseas Consultants for the Medium/Long-Term Planning of the Ministry of Science and Technology (2004-2006). He is an advisor to a number of world-renowned organizations and journals, including Future Earth, American Geophysical Society, G20 Global Health, Lancet Public Health and Lancet Planetary Health. In 2019, he was appointed as a member of the Earth Commission. He was elected as a Foreign Member of the Academia Europaea in 2020.



Professor Qinghua Guo is the Director of the Institute of Remote Sensing and Geographic Information System at Peking University. He obtained his bachelor's and master's degrees from Peking University and his Ph.D. from the University of California, Berkeley. Prior to returning to China, he was a founding professor and tenured faculty member at the University of California, Merced, where he served as the Director of the Spatial Analysis Center. He has been recognized as an Overseas High-Level Talent (Youth) and a Leading Talent in Scientific and Technological Innovation under the Ministry of Science and Technology's "Ten Thousand Talents Program." He previously served as the President of the International Chinese Geographic Information Science Association (CPGIS) and the Deputy Director of the Drone Application and Management Research Center, Chinese Academy of Sciences. He currently holds positions as the Associate Editor for the journal Biodiversity and a Visiting Professor at the Nevada Institute of the University of California. Professor Guo has been included in Stanford's 2023 list of the world's top 2% of scientists and has ranked highly in global academic influence. His primary research focuses on multi-source remote sensing technology based on LiDAR and its interdisciplinary applications in ecological environments and urban studies. He has published over 160 SCI papers in leading journals such as Nature Ecology & Evolution, Nature Communications, IEEE GRSM, Remote Sensing of Environment, and ISPRS. His team has developed LiDAR hardware and software that has gained widespread adoption among users in national grid companies, the State Forestry and Grassland Administration, survey bureaus, as well as in over 130 countries and regions, including the United States, Europe, and Japan.



Professor Liang received his BS and MS degrees from Nanjing University and Ph.D degree from Boston University. He published more than 430 peer-reviewed English journal papers, eight English books (five of which were translated into Chinese and published in China). He is an Editor-in-Chief of Science of Remote Sensing. He was the Editor-in-Chief of the nine-volume books "Comprehensive Remote Sensing "(Elsevier, 2017), and is currently working on the second edition of those books as the Editor-in-Chief. He also served as an Associate Director of the State Key Laboratory of Remote Sensing Sciences, and the Dean of School of Geography, Beijing Normal University, China. He has led to develop many high-level satellite products, particularly, the Global LAnd Surface Satellite (GLASS) products suite that is freely available at www.glass.umd.edu and www.geodata.cn, and has been widely used worldwide.



Professor Yu Liu is the Vice Dean at the School of Earth and Space Sciences at Peking University, as well as a recipient of the National Science Fund for Distinguished Young Scholars. His primary research focuses on methods and applications for geographic big data analysis, with his proposed social perception theory having a significant impact in the international academic community. He has led over ten research projects, including key projects funded by the National Natural Science Foundation of China and the National Key Research and Development Program, and has published more than 120 SCI/SSCI papers. He has received numerous awards, including the Grand Prize of the Geospatial Information Technology Progress Award and the Beijing Natural Science Award. Currently, he serves as a member of the Scientific and Technological Commission of The Ministry of Education of the People's Republic of China, the Deputy Chairperson of the Theory and Methodology Working Committee of the China Association for Geospatial Industry and Sciences, the Deputy Chairperson of the Urban Big Data Professional Committee of the Chinese Society for Urban Studies, and the editorial board members of journals such as Computers, Environment, and Urban Systems, Journal of Spatial Information Science, and Remote Sensing.

Professor Huanfeng Shen is the Dean of the School of Resource and Environmental Science at Wuhan University, as well as the Director of the SENsed Data Intelligent-analytics, Merging and Applications, in GEoscience (SENDIMAGE) Lab. He is a Distinguished Professor of the Chang Jiang Scholars Program and a Fellow of the Institution of Engineering and Technology in the UK. His primary research focuses on remote sensing of natural resources and the environment, multi-source data fusion, and geoscience intelligence. He has led two national key research and development projects and seven projects funded by the National Natural Science Foundation of China. Professor Shen has published an academic trilogy on remote sensing data titled "Restoration-Calibration-Reconstruction," and his research papers have been recognized among the "Top 100 Most Influential International Academic Papers in China" (2021). His work has been cited over 11,000 times in Web of Science, and he has been listed among Stanford University's top 2% of scientists globally, as well as being recognized as a Highly Cited Researcher by Clarivate Analytics and a Highly Cited Scholar by Elsevier. His research outcomes have been applied in the data processing systems of multiple domestic satellites and widely utilized in the field of resource and environmental studies. He serves as the Regional Editor for J. App. Remote Sens., the Associate Editor for the Journal of Remote Sensing, the Associate Editor for the Journal of Wuhan University (Information Science Edition), and is a member of the editorial boards for journals such as ISPRS Journal of Photogrammetry and Remote Sensing. He is also the Deputy Director of the Big Data and Artificial Intelligence Working Committee and Deputy Director of the Satellite Application Working Committee of the Chinese Society for Geodesy Photogrammetry and Catography, a member of the Theory and Methods Committee of the China Association for Geospatial Industry and Sciences, and a council member of the Chinese Young Geoscientists Forum.



CK SHUM 教授

俄亥俄州立大學 The Ohio State University

C K Shum is a Professor and Distinguished University Scholar, Division of Geodetic Science, School of Earth Sciences, at The Ohio State University, USA. He is a Fellow of the American Association for the Advancement of Science, and a Fellow of the International Association of Geodesy. As a Lead Author of the Intergovernmental Panel on Climate Change (IPCC) Assessment, he contributed to the 2007 Nobel Peace Prize, which was awarded jointly to IPCC and Al Gore, Jr., "for their efforts to understand and to counteract the man-made climate crisis". He received the 2012 Vening Meinesz Medal from the European Geosciences Union for his "distinguished research in Geodesy applied to sea-level science". His research foci include sea-level and climate science on the observation and quantification of geophysical processes contributing to present-day sea-level change. These processes include ice reservoir mass ablation/accumulation, steric and mass sea level, global water cycle, anthropogenic water retention and groundwater extraction, glacial isostatic adjustment and other solid Earth/seafloor deformation. He conducts research on interdisciplinary satellite geodesy including precision orbit determination, temporal and mean global gravity field modeling, tides, satellite hydrology/oceanography/glaciology, geodynamics, earthquakes, GNSS meteorology, space physics, seafloor geodesy, and deep-learning analytics aided climateinduced hazards monitoring and management. He uses geodetic tools including satellite altimetry, satellite gradiometry/gravimetry, satellite laser ranging, DORIS, GNSS, GNSS-reflectometry/other Signals of Opportunities, synthetic aperture radar (SAR) and interferometric SAR (InSAR), and imageries. He has published over 379 refereed journal articles and book chapters, with Google Scholar citations of 21,593, h-index of 67, and i-10 Index of 258, [Assessed 4/2024]. As an Earth Scientist, he has a World Ranking of 1,260, and a National (US) Ranking of 601, by Research.com. His work was covered by New York Times, Physics Today, Sky & Telescope Radio Show, Discoveries and Breakthroughs Inside Science TV, Science News, Science Daily, Live Science, Scientific American, Soundings magazine, Deccan Chronicle, La Figaro, MSNBC.com, Tomorrow Focus Portal GmbH, Axel Springer AG, Televisión Española, Neue Zürcher Zeitung, Zurich, Columbus Dispatch, The Toledo Blade, American Geophysical Union, ESA Earth Online, National Academy of Sciences Press, AAAS EurekAlert!, Ohio State University press, Ohio State Insights, Ohio State University Sustainability Institute News, Sci.Dev.Net, Environmental News Network, The Atlantic, Epsiloon, and others.



Yizhou Yu is a chair professor and the director of AI Lab in the Department of Computer Science at the University of Hong Kong. He was first a tenure-track and then a tenured professor at University of Illinois, Urbana-Champaign (UIUC) for twelve years. He has also collaborated with Google Brain and Microsoft Research in the past. He received his PhD degree in computer science from the computer vision group at University of California, Berkeley. He also holds a MS degree in applied mathematics and a BE degree in computer science and engineering from Zhejiang University. He is an ACM Fellow and IEEE Fellow. Prof Yu has made important contributions to AI and visual computing, including deep learning, computer vision, image processing, medical image analysis, and computer graphics. He has been named 2022 World's Top 2% Scientists by Stanford University, AI 2000 Most Influential Scholar (honorable mention), and is a recipient of US National Science Foundation CAREER Award, ACCV Best Application Paper Award, and ACM SCA Best Paper Awards. Technologies co-invented by him have been frequently adopted by the film and healthcare industries. He has more than 100 publications in top international conferences and journals, including AAAI, CVPR, ICCV, ICLR, NeurIPS, SIGGRAPH, TIP, TMI, TOG, and TPAMI. His current research interests include AI foundation models, AI based multimedia content generation, AI for medicine, and computer vision.



武漢大學 Wuhan University

Professor Liangpei Zhang is a distinguished professor at Wuhan University and an IEEE Fellow, and has published seven monographs and over 500 SCI papers, which have been cited more than 57,300 times on Google Scholar. He is a Highly Cited Researcher according to Clarivate Analytics and has received numerous prestigious international awards, including the IEEE RSS David Landgrebe Award, IEEE TGRS Award, Theoretical Innovation Award from the International Society for Optical Engineering, Boeing Award from the American Society for Photogrammetry and Remote Sensing, and the ERDAS Award. He has also won the National May 1st Labor Medal, one National Science and Technology Progress Award, seven provincial and ministerial first prizes, and has been recognized twice as an outstanding doctoral thesis supervisor in the country. He has led over 60 projects, including the 973 Program, 863 Program, and key projects funded by the National Natural Science Foundation of China, and holds more than 50 invention patents. He has independently developed hyperspectral remote sensing information processing software, high-resolution remote sensing image processing systems, UAV thermal sensing hardware and software systems, and mobile robot measurement systems. His research findings are widely applied in major areas such as the construction of China's remote sensing satellite ground systems, major projects for high-resolution remote sensing, disaster monitoring in the Three Gorges Reservoir area, national defense projects, and COVID-19 response efforts.



Professor Weiqi Zhou is a researcher at the Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences. He serves as the Deputy Director of the State Key Laboratory of Urban and Regional Ecology, the Director of the National Field Science Observation and Research Station for Ecological Environment Changes and Comprehensive Management in the Beijing-Tianjin-Hebei Region, and is a recipient of the National Science Fund for Distinguished Young Scholars. His research primarily focuses on urban ecological remote sensing, the ecological and environmental effects of urbanization, and the simulation and optimization of urban ecological spatial patterns. He has published over 100 papers as the first or corresponding author in domestic and international academic journals such as the National Science Review and One Earth. Additionally, he serves as the Vice President of the International Landscape Ecology Society, the Secretary-General of the Ecological Society of China, and the Deputy Editor of Landscape and Urban Planning. He has also been recognized as a "Highly Cited Scientist" by Clarivate Analytics.

校園地圖 University Map



29 NOV 2024

登記及報到 Registration and Check-in

30 NOV 2024 & 01 DEC 2024

會議 Workshop

香港大學 百周年校園 賽馬會教學樓 10樓 地理系

Department of Geography, 10F, The Jockey Club Tower, Centennial Campus, The University of Hong Kong

香港大學 學生發展及資源中心 莊月明文化中心 5樓 月明劇院

Yuet Ming Auditorium, 5F, Chong Yuet Ming Cultural Centre, Centre of Development and Resources for Students, The University of Hong Kong



餐飲地圖 Catering Map



- 1. Chong Yuet Ming Amenities Centre Restaurant
- 9. 4/F, Chong Yuet Ming Cultural Centre
- 😢 Local fast food and Cha Chaan Teng

2. Café 330

- 2/F, Chong Yuet Ming Amenities Centre
- Hot meal, salads, sandwiches and coffee

3. Vending Hub

- 🤶 G/F, Chong Yuet Ming Amenities Centre
- Vending service for ready-to-eat lunch boxes, Chinese rice ball, Japanese rice ball, dessert, snacks, coffee and beverages

4. Fong Shu Chuen Amenities Centre Restaurant

- 2/F, Fong Shu Chuen Amenities Centre
- 😒 Local fast food and Asian food

5. 27 Kebab House

- 🡤 1/F, Fong Shu Chuen Amenities Centre
- 😢 Halal food and beverages

6. SUBWAY

- Զ 🛛 Run Run Shaw Podium
- 😢 Submarine sandwiches and beverages

7. Kiosk by The Sandwich Club

- 🤶 Run Run Shaw Podium
- 篖 Bento boxes, pastries, sandwiches and salads
- 8. The Coffee Academics
- 🤶 G/F, Library Building (Old Wing)
- Specialty coffee, sandwiches and salads



9. Union Restaurant

- 🤶 4/F, Haking Wong Building
- 😒 Local fast food and Asian food

10. Vending Nook

- 🤶 G/F, Composite Building
- (*) 24/7 vending service for ready-to-eat Japanese rice ball, dessert, snacks and beverages

11. Starbucks Coffee

- 🤶 G/F, Composite Building
- ★ Coffee, pastries, sandwiches and salads
- 12. Shop G02 (under renovation, tentative opening in Sep)
- S G/F, Composite Building
- Please stay tuned for further update at cedars.hku.hk/catering

13. Shop G01

(under renovation, tentative opening in Sep)

- 🤶 G/F, Composite Building
- Please stay tuned for further update at cedars.hku.hk/catering

14. Oliver's Super Sandwiches

- Զ 🛛 LG/F, The Jockey Club Tower, Centennial Campus
- 🛞 Sandwiches, baked potato, pasta, salad and coffee

15. alfafa café

- 👤 G/F, The Jockey Club Tower, Centennial Campus
- 🛞 Pasta, sandwiches, salads, pastries and specialty coffee

16. Gourmet Asia

- 🤶 G/F, Run Run Shaw Tower, Centennial Campus
- 😥 Southeast Asia cuisine

17. BIJAS Vegetarian

- 🤶 G/F, Run Run Shaw Tower, Centennial Campus
- 😢 Vegetarian food (Chinese cuisine)



