

2025 RISK SCIENCES ANNUAL CONFERENCE



Zhu Wenjun (Assoc Prof)

LOCATION: **WEE CHO YAW PLAZA (FORMERLY GAIA)**
NANYANG BUSINESS SCHOOL (91 NANYANG AVENUE)

DATE: 10 Sep 2025 (8:00 – 21:00)

ORGANIZERS: Nanyang Business School, Nanyang Technological
University
School of Economics and Management, Tsinghua
University

2025 RISK SCIENCES ANNUAL CONFERENCE

CONFERENCE PROGRAM AT A GLANCE

LOCATION:	WEE CHO YAW PLAZA (FORMERLY GAIA) NANYANG BUSINESS SCHOOL (91 NANYANG AVENUE)
DATE:	10 Sep 2025 (8:00 – 21:00)
ORGANIZERS:	Nanyang Business School, Nanyang Technological University School of Economics and Management, Tsinghua University

Time	Activity	Venue
08:00 – 08:45	Registration	
08:45 – 09:00	Opening Remarks	Gaia Auditorium
09:00 – 10:30	Keynote Panel 1: Strengthening Financial System: Corporate Risk, Capital Markets, and Retirement Challenges - Speakers: Prof. David Blake, Prof. Xin (Simba) Chang, Prof. Katja Hanewald, Prof. Moshe Arye Milevsky, Prof. Wei Zheng	Gaia Auditorium
10:30 – 11:00	Coffee Break	
11:00 – 12:30	Keynote Panel 2: Confronting Climate Change: Risk Modeling, Financial Solutions, and Resilient Systems - Speakers: Prof. Enrico Biffis, Prof. Benjamin Horton, Prof. Steve Yim, Prof. Yildiray Yildirim, Prof. Jun Zhuang	Gaia Auditorium
12:30 – 13:45	Lunch Break	
13:45 – 15:15	Keynote Panel 3: Governing Emerging Risks: AI, Digital Health, and the Future of Risk Management - Speakers: Prof. Jan Dhaene, Prof. Leonard Lee, Prof. Ruodu Wang, Prof. Wenfeng Wu, Prof. Xiaofei Xie	Gaia Auditorium
15:15 – 15:45	Coffee Break	
15:45 – 16:45	Parallel Session I	See Detailed Program
16:45 – 17:00	Short Break	
17:00 – 18:00	Parallel Session II	See Detailed Program
18:30 – 21:00	Gala Dinner	Nanyang Pavilion

CONFERENCE PROGRAM IN DETAIL

Time	Activity
08:00 – 08:45	Registration
08:45 – 09:00	Opening Remarks <ul style="list-style-type: none"> - Ms. Min Hung Cheng, CEO, Global Asian Insurance Partnership (GAIP) - Prof. Runhuan Feng, Chair Professor, School of Economics and Management, Tsinghua University & Executive Editor-in-Chief, <i>Risk Sciences</i> - Prof. Adam D. Switzer, Professor, Asian School of the Environment & Director, CIFAL @ NTU, Assistant Dean (Development), College of Science, NTU - Prof. Shinichi Kamiya, Co-Director, Insurance Risk and Finance Research Centre (IRFRC), Nanyang Technological University - Prof. Wenjun Zhu, Deputy Head, Division of Banking & Finance & Deputy Director, Insurance Risk and Finance Research Centre (IRFRC)
09:00 – 10:30	Keynote Panel 1 - Strengthening Financial System: Corporate Risk, Capital Markets, and Retirement Challenges Moderator: Prof. Joey Zhou <ul style="list-style-type: none"> - Prof. David Blake, Professor & Director of the Pensions Institute, Bayes Business School, City St George's, University of London - Prof. Xin (Simba) Chang, Professor of Finance & Associate Dean (Research), Nanyang Business School (NBS), Nanyang Technological University (NTU) - Prof. Katja Hanewald, Associate Professor, UNSW School of Risk and Actuarial Studies & President of the Asia-Pacific Risk and Insurance Association (APRIA) - Prof. Moshe Arye Milevsky, Professor of Finance, Schulich School of Business, York University - Prof. Wei Zheng, Professor, Head of the Department of Risk Management and Insurance at the School of Economics, & Director of the China Center for Insurance and Social Security Research (CCISSR), Peking University
10:30 – 11:00	Coffee Break
11:00 – 12:30	Keynote Panel 2 - Confronting Climate Change: Risk Modeling, Financial Solutions, and Resilient Systems Moderator: Prof. Jade Nie <ul style="list-style-type: none"> - Prof. Enrico Biffis, Associate Professor of Actuarial Finance & Academic Director of the Centre for Climate Finance and Investment (CCFI), Imperial College Business School - Prof. Benjamin Horton, Chair Professor of Earth Science & Dean of the School of Energy and Environment (SEE) at City University of Hong Kong (CityUHK) - Prof. Steve Yim, Professor & Director of the Center for Climate Change and Environmental Health (CCEH), Asian School of the Environment & Lee Kong Chian School of Medicine, Nanyang Technological University (NTU) - Prof. Yildiray Yildirim, William Newman Professor in Real Estate Finance, Chair of Department of Real Estate & Director, Steven Newman Real Estate Institute, Baruch College, CUNY - Prof. Jun Zhuang, Morton C. Frank Professor & Associate Dean for Research, School of Engineering and Applied Sciences (SEAS), University at Buffalo (UB)
12:30 – 13:45	Lunch Break

CONFERENCE PROGRAM IN DETAIL (CON'D)

Time	Activity
13:45 – 15:15	Keynote Panel 3- Governing Emerging Risks: AI, Digital Health, and the Future of Risk Management Moderator: Prof. Jinggong Zhang <ul style="list-style-type: none"> Prof. Jan Dhaene, Professor & Head of the Research Centre Insurance (Actuarial Research Group), Department Accountancy, Finance and Insurance, Faculty of Business and Economics, KU Leuven Prof. Leonard Lee, Director and Lloyd's Register Foundation Professor of Lloyd's Register Foundation Institute for the Public Understanding of Risk (IPUR), and Professor of Marketing at NUS Business School, National University of Singapore (NUS) Prof. Ruodu Wang, Tier-1 Canada Research Chair in Quantitative Risk Management and Professor of Actuarial Science and Quantitative Finance, University of Waterloo Prof. Wenfeng Wu, Professor of Finance, Antai College of Economics and Management & Director of Division for Development Liberal Arts, Shanghai Jiao Tong University Prof. Xiaofei Xie, Assistant Professor and Lee Kong Chian Fellow, Singapore Management University (SMU)
15:15 - 15:45	Coffee Break
15:45 - 16:45	Parallel Session I (PSI)
	<i>PSI-A: Biodiversity and Environmental Risk (Moderator: Tracy Xie)</i> <i>Gaia Auditorium</i>
15:45 - 16:00	Indebted to Nature: Corporate Biodiversity Endowment and Bond Market Reactions - Han Xing, University of Auckland
16:00 - 16:15	Ready for Risk Convergence & Emergence of Polycrisis - Gupta Praveen, Sanctuary Asia
16:15 - 16:30	Insuring Against the Heat - Chua Yeow Hwee, Nanyang Technological University
16:30 - 16:45	Transition Risk in Energy Transition: A Double Materiality Approach to Risk Mitigation and Value Creation - Tracy Xie, E2 Advisory
	<i>PSI-B: AI Risk (Moderator: Zeng Jing)</i> <i>TR+151 (S4-B2C-36)</i>
15:45 - 16:05	A Study of The Impact of Artificial Intelligence Technology Application on Corporate ESG Performance - Yupei Wu, SWUFE
16:05 - 16:25	Navigating Artificial Intelligence Risk: Investigating the Adoption Intention for Driverless Vehicles Through an Extended Technology Acceptance Model - Weiwei Zhu, Hefei University of Technology
16:25 - 16:45	Measurement and Analysis of Residents' Risk Perception of Artificial Intelligence Embedded in Urban Governance - Zeng Jing, Southwest University of Science and Technology

CONFERENCE PROGRAM IN DETAIL (CON'D)

Time	Activity	
	<i>PSI-C: Climate Change and Sustainability I (Moderator: Tianhao Zhi)</i>	<i>TR+152 (S4-B2C-38)</i>
15:45 - 16:00	Sustainability Risks under Lotka-Volterra Dynamics - Tianhao Zhi, Beijing Normal-Hong Kong Baptist University	
16:00 - 16:15	Optimizing Socio-Economic Resilience: Data-Driven Analysis of Weather Risk on Hong Kong Households - Justin Chen, Chinese International School	
16:15 - 16:30	Pricing Climate Change Exposure: New Evidences from Chinese Listed Companies - Jundu Wu, Hunan Normal University	
16:30 - 16:45	Climate Change and Insurer Performance - Canchun He, Peking University	
	<i>PSI-D: Mortality and Longevity Risk I (Moderator: Ze Chen)</i>	<i>TR+61 (SS1-B1-07)</i>
15:45 - 16:00	A Simulation Study on the Incentive of Personal Pension Contributions for Rural Residents in China - Jianhai Yang, Beijing Technology and Business University	
16:00 - 16:15	The Real Effects of the Recent Life Expectancy Shock - Ze Chen, Renmin University	
16:15 - 16:30	An assessment framework for equitable longevity pooling arrangements - Thalagoda Gayani, UNSW Sydney	
16:30 - 16:45	Can improving longevity literacy motivate interest in life annuities? - Jiamin Yan, UNSW Sydney	
	<i>PSI-E: Machine Learning (Moderator: Zhiyu Quan)</i>	<i>TR+64 (SS1-B1-04)</i>
15:45 - 16:05	InsurTech innovation using natural language processing - Zhiyu Quan, University of Illinois Urbana-Champaign	
16:05 - 16:25	Enhancing Risk Classification in Bonus-Malus Systems Using Telematics and Neural Networks - Andres Villegas Ramirez, UNSW Sydney	
16:25 - 16:45	An Optimal Economic Epidemiological Framework Using Neural Networks - Chang Zhai, University of Melbourne	

CONFERENCE PROGRAM IN DETAIL (CON'D)

Time	Activity	
	<i>PSI-F: Catastrophe Risk (Moderator: Xiaowei Chen)</i>	<i>TR+65 (SS1-B1-03)</i>
15:45 - 16:00	Multifactor CAT Bond Pricing Using Distortion Operator Models with Neural Networks - Xiaowei Chen, Nankai University	
16:00 - 16:15	Catastrophe risk sharing with insurance levy under distortion risk measures - Yiyang Zhang, Southern University of Science and Technology	
16:15 - 16:30	From Monsoons to Megacities: A Hybrid Modeling Blueprint for the Asia-Pacific's Catastrophe Resilience - Tao Guo, Ecomonitor	
16:30 - 16:45	Can Catastrophic Health Insurance for Urban and Rural Residents Alleviate Health Inequality? Empirical Evidence from China - Chufeng Yang, Southeast University	
	<i>PSI-G: Risk Theory (Moderator: Wing Fung (Alfred) Chong)</i>	<i>TR+68 (SS1-B1-14)</i>
15:45 - 16:00	Stochastic dominance for linear combinations of infinite-mean risks - Yuyu Chen, University of Melbourne	
16:00 - 16:15	Disagreement on Tail - Jiangyuan Li, Shanghai University of Finance and Economics	
16:15 - 16:30	Variance Risk Premia under Volatility Models - Chuan-Hsiang Han, National Tsing-Hua University	
16:30 - 16:45	Capital-Allocation-Induced Risk Sharing - Wing Fung (Alfred) Chong, The University of Hong Kong	
16:45 - 17:00	Short Break	
17:00 - 18:00	Parallel Session II (PSII)	
	<i>PSII-A: Climate Change and Sustainability II (Moderator: Yanbin Xu)</i>	<i>Gaia Auditorium</i>
17:00 - 17:20	A View of Future Cyclone Risk in the Asia Pacific - Yanbin Xu, Nanyang Technological University	
17:20 - 17:40	A Study on the Impact of Climate Change on the Solvency of the Insurance Industry and Corresponding Response Strategies - Fu Yang, Xi'an University of Finance and Economics	
17:40 - 18:00	Academic Interests in Global Risks - Rongtao Duan, Peking University	

CONFERENCE PROGRAM IN DETAIL (CON'D)

Time	Activity	
	<i>PSII-B: Mortality and Longevity Risk II (Moderator: Lingfeng Lyu)</i>	<i>TR+151 (S4-B2C-36)</i>
17:00 - 17:15	Longevity Bond Pricing in Pension with Positive Jumps - Yitian Xu, Central University of Finance and Economics	
17:15 - 17:30	Financing Aged Care with Home Equity Allowing for Government Age Pension and Aged Care Support - Lingfeng Lyu, UNSW Sydney	
17:30 - 17:45	Study on the Endogenous Linkage Optimization of Life Insurance Companies' Assets and Liabilities under Longevity Risk Shock -- Synergetic Modeling Based on C-ROSS II and Dynamic Hedging Strategies - Zihan Jiao, Beijing Technology and Business University	
17:45 - 18:00	PM2.5-Associated Premature Mortality Attributable to Hot-And-Polluted Episodes and the Inequality Between the Global North and the Global South - Tao Huang, Nanyang Technological University	
	<i>PSII-C: Insurance, Health & Corporate Responsibility (Moderator: Shangcong Liang)</i>	<i>TR+152 (S4-B2C-38)</i>
17:00 - 17:20	Medical Insurance Payment and Insured Equity: A Study on the Insurance Coverage Effects of Basic Medical Insurance in Palliative Care Services - Shangcong Liang, Southwestern University of Finance and Economics	
17:20 - 17:40	Foodborne disease Risk Assessment and Monitoring Enhancement (FRAME) for Mitigating Aflatoxin B1-Related Health Risks along China's Food Supply Chain - Zhengcong Wang, Huazhong Agricultural University	
17:40 - 18:00	Reputation in Insurance: Unintended Consequences for Capital Allocation - Harold Guo, Academy of Mathematics and Systems Science, Chinese Academy of Sciences	
	<i>PSII-D: Risk Transfer & Management (Moderator: Xiaobai Zhu)</i>	<i>TR+61 (SS1-B1-07)</i>
17:00 - 17:15	Innovating Risk Transfer: Weather-Indexed Smart Contracts for Climate-Resilient Infrastructure - Jain Yash, Cliff Horizon Pte. Ltd.	
17:15 - 17:30	Moral Hazard in Index Insurance - Xiaobai Zhu, The Chinese University of Hong Kong	
17:30 - 17:45	The Vicious Cycle of Bad Faith Denial, Buildup Claims, and Premium Adjustment: An Experimental Study - Yeonjae Lee, Beijing Technology and Business University	
17:45 - 18:00	Have you Reached the Standard in Risk Management? Information Island and Resilience of Safety Network - Jianting Yao, Zhejiang University	

CONFERENCE PROGRAM IN DETAIL (CON'D)

Time	Activity	
	<i>PSII-E: Auto Risk and Insurance Innovation (Moderator: Xindi Fang)</i>	<i>TR+64 (SS1-B1-04)</i>
17:00- 17:20	Using Self-assessment Data in Automobile Insurance Risk Assessment with Dynamic Modelling - Xindi Fang, The University of Melbourne	
17:20 - 17:40	Does P/L insurance accelerate the spatial diffusion of new energy vehicles in China? - Xiangyou Wu, Minjiang University	
17:40 - 18:00	The Paradox of Explainability in AI-Driven Autonomous Vehicles: Mapping Ethical Risk Landscapes Through Public Cognition - Jia Xu, Hohai University	
	<i>PSII-F: Supply Chain & Technology (Moderator: Che Zhang)</i>	<i>TR+65 (SS1-B1-03)</i>
17:00 - 17:20	From Fragility to Flexibility: How do Firms Respond to Upstream Technology Vulnerability? - Che Zhang, Tsinghua University	
17:20 - 17:40	Research on Crisis Learning Mechanism and Organizational Resilience Enhancement Based on Production Safety Accidents - Shanshan Lu, Hefei University of Technology	
17:40 - 18:00	Interactions among human and organizational factors in counter-terrorism security at large-scale events - Lipeng Fu, Fuzhou University	
	<i>PSII-G: Finance (Moderator: Yang Fu)</i>	<i>TR+68 (SS1-B1-14)</i>
17:00 - 17:15	The Impact of Financial Sanctions on the Restructuring of Global Value Chains: Empirical Evidence from Global Sanctions Data - Guohao Zou, Southeast University	
17:15 - 17:30	An Exploration of the Impact of Bitcoin Options Futures Market Position Behaviour on Basis Spreads and Futures Spot Returns - Jiayu Shen, Zhejiang University	
17:30 - 17:45	Unified National Market Development and Corporate Risk-Taking -- A Quasi Experiment from the Chinese Standardization Comprehensive Reform Pilot Project - Shiyu Wu, Beijing Normal University	
17:45 - 18:00	The impact of Environmental Pollution Liability Insurance on Corporate ESG Performance: Evidence from China's Industrial Listed Enterprises - Yang Fu, Xi'an University of Finance and Economics	
18:30 - 21:00	Gala Dinner	Nanyang Pavilion

Conference Venue: Wee Cho Yaw Plaza (Formerly Gaia), Nanyang Business School

Address: Nanyang Business School, 91 Nanyang Ave, Wee Cho Yaw Plaza, formerly Gaia, 639956



Dinner Venue: Nanyang Pavilion, on Nanyang Lake (3-5 min walk from NBS). We will have NBS faculties walking delegates to the venue after the meeting.

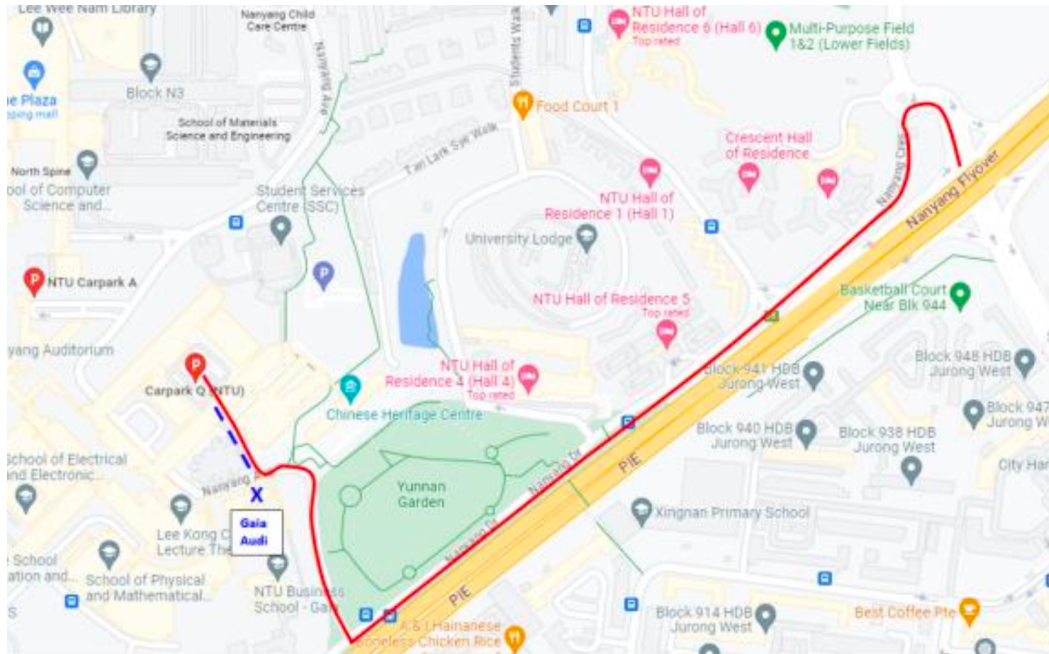


Driving/Parking and Public Transportation to GAIA: See next few pages

Driving & Parking at to Wee Cho Yaw Plaza (Formerly Gaia)

Address: Nanyang Business School, 91 Nanyang Ave, Wee Cho Yaw Plaza, formerly Gaia, 639956

Driving Directions to Carpark Q and Wee Cho Yaw Plaza (Formerly Gaia) building



Carpark Q: Please route to “Carpark Q (NTU)” on Google Maps

(https://maps.app.goo.gl/GnHp3uCiicw99jtB8?g_st=ig)

Red – Driving Route
Blue – Walking Route

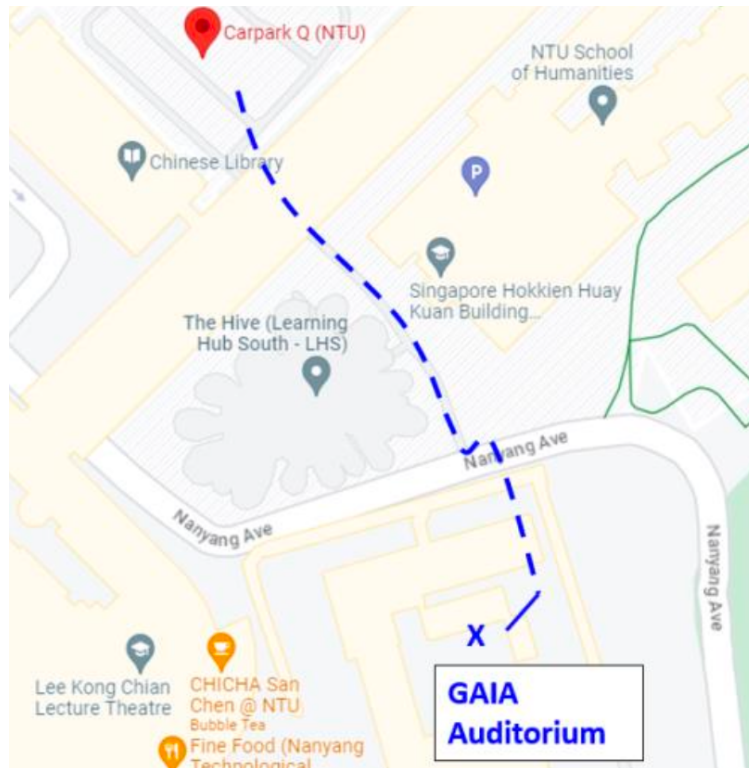
Driving Directions to Carpark Q (Open Air Carpark):

1. Search for “**Carpark Q (NTU)**” on Google Maps (<https://maps.app.goo.gl/s5Ds7PxN2JtQwz4d7>)
2. Exit PIE on the left at Pioneer Road North (exit 38).
3. Immediately keep to the right lane after the exit from PIE.
4. Make a left turn at Nanyang Crescent.
5. Continue straight onto Nanyang Drive.
6. Drive pass Yunnan Garden and make a right turn after it.
7. You will see a ‘Bee-Hive’ like building ahead (The Hive).
8. Turn right into Carpark Q.

Note: Please do not park in reserved (yellow or red) lots. An unclamp fee will be charged.

Directions to Wee Cho Yaw Plaza (Formerly Gaia) at NTU

1. Walk towards Hive and walk past Hive.
2. You will see a zebra crossing on your left, cross the Zebra crossing and walk down the staircase.
3. Enter and continue to walk straight (30m), Wee Cho Yaw Plaza (Formerly Gaia) is on your right.



Taking Taxi to Nanyang Business School

Address: 91 Nanyang Ave, Academic South Academic Building, Singapore 639956

To get to NBS via taxi, we recommend booking a ride via the **Grab/TADA** app, which you can download from the App Store or Google Play. Simply key in "91 Nanyang Avenue, Nanyang Business School, 639956" and set either "GAIA Lobby" as your destination, and the driver will bring you directly to the entrance of the building.

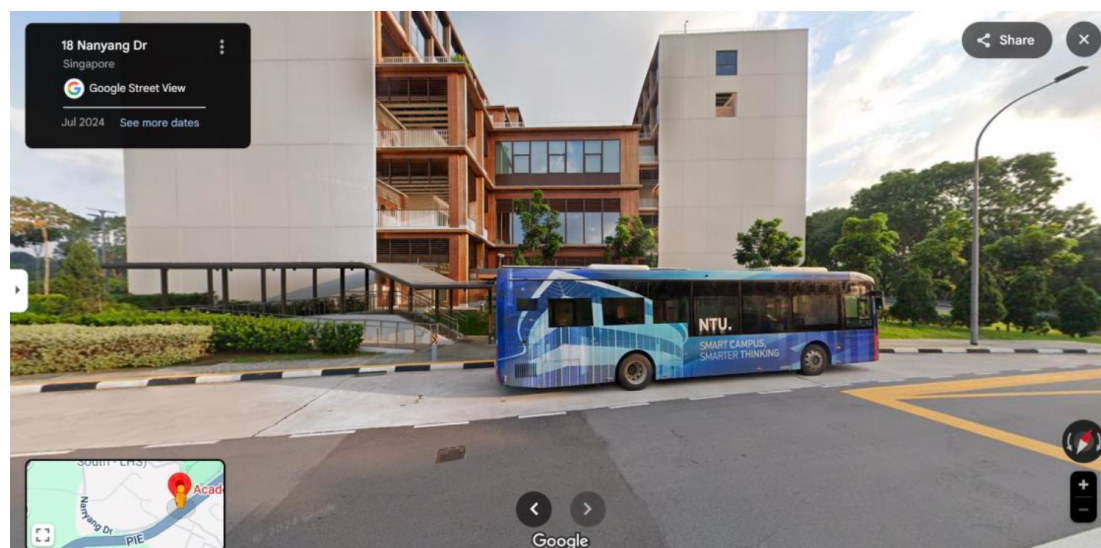
Taking Public Transport to Nanyang Business School

Address: 91 Nanyang Ave, Nanyang Business School at Wee Cho Yaw Plaza, formerly Gaia, 639956

1. Take bus 179 from Boon Lay Bus Interchange, Berth B3.



2. Alight at **Academic Bldg Sth.** (15 stops)

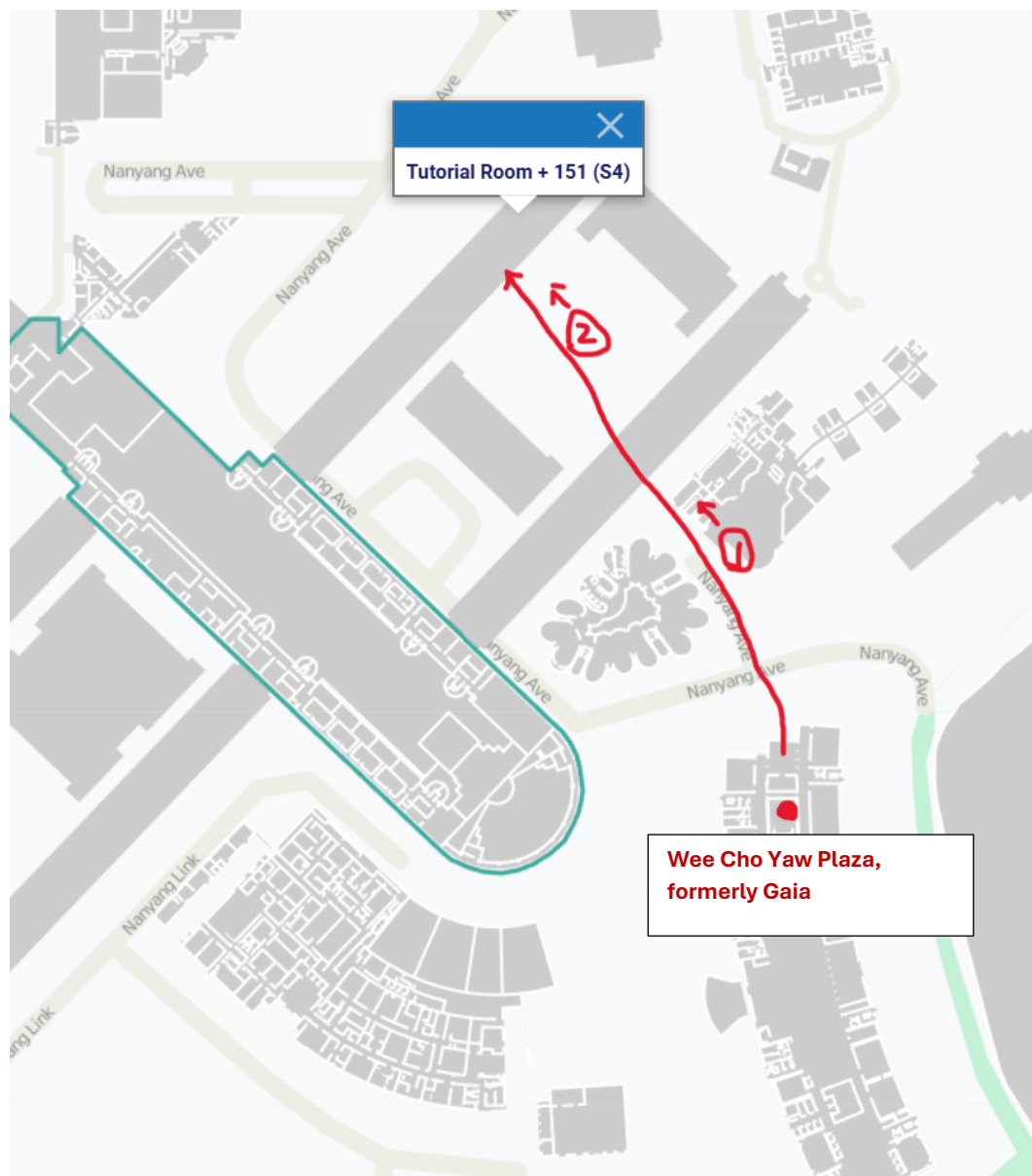


Direction from Gaia Auditorium (main conference venue) to parallel session venues:

- TR+151 (S4-B2C-36) TR+152 (S4-B2C-38), which are clustered together
- TR+61 (SS1-B1-07) TR+64 (SS1-B1-04) TR+65 (SS1-B1-03) TR+68 (SS1-B1-14), which are clustered together
- Between TR+151 and TR+61 clusters

From Gaia Auditorium to TR+151 (S4-B2C-36) and TR+152 (S4-B2C-38)

1. Follow the red arrowed line below



2. Check point 1: pass through Hive (the dim-sum-shape building) on the left



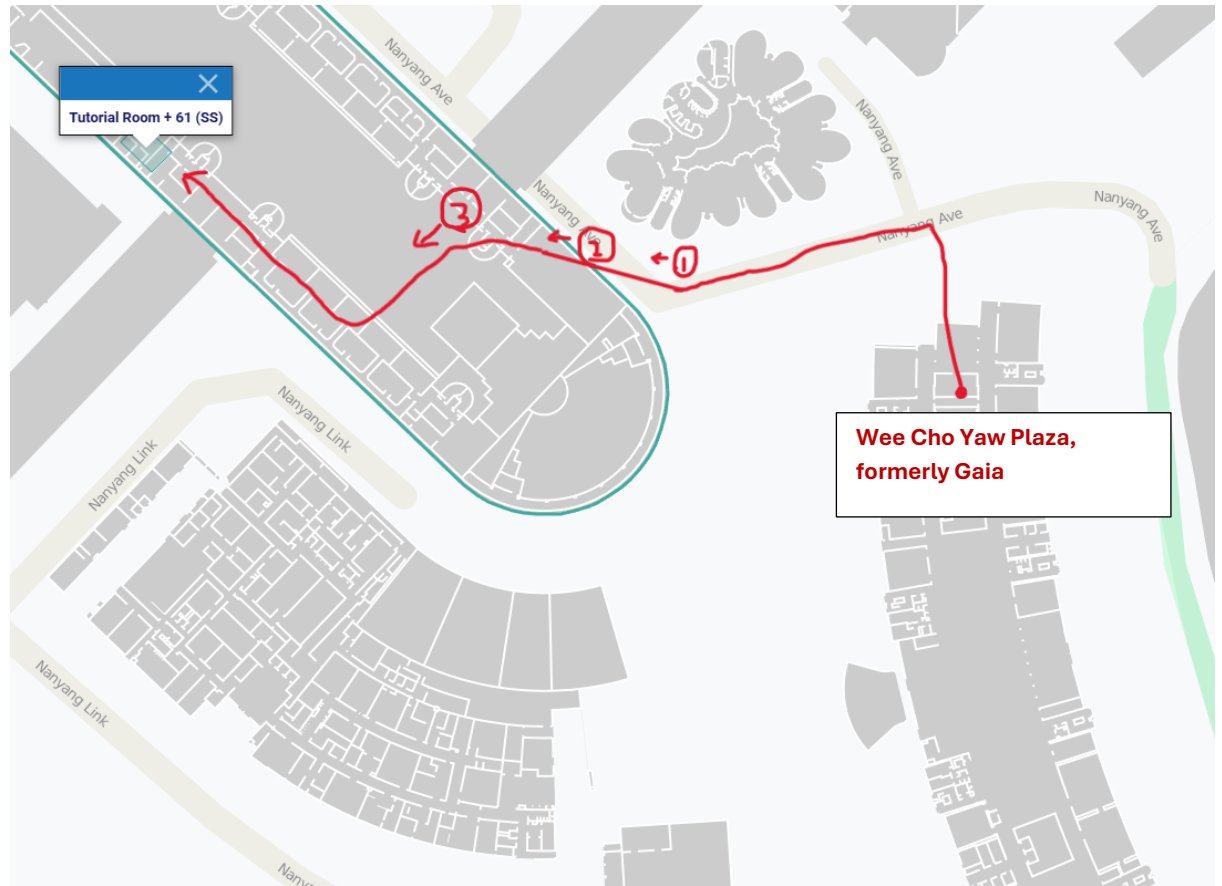
3. Check point 2: cross a parking lot and reach the building ahead (Rajaratnam School of International Studies)



4. Take a lift up to Floor B2 (from B5) and reach TR+151 (S4-B2C-36) & TR+152 (S4-B2C-38)

From Gaia to TR+61 (SS1-B1-07), TR+64 (SS1-B1-04), TR+65 (SS1-B1-03) & TR+68 (SS1-B1-14)

1. Follow the red arrowed line below



2. Check point 1: pass through Hive (the dim-sum-shape building) on the right and turn right at the picture below (remaining on the main road and keeping to your left)



3. Check point 2: Climb up a few stairs (as shown in picture below) to enter South Spine building



4. Check point 3: Cross the entire car park (shown in picture below) to reach the building ahead



5. Take a lift up to Floor B1 (from B3) and reach TR+61 (SS1-B1-07), TR+64 (SS1-B1-04), TR+65 (SS1-B1-03) and TR+68 (SS1-B1-14)

How to go between TR+151 (S4-B2C-36), TR+152 (S4-B2C-38) and TR+61 (SS1-B1-07) TR+64 (SS1-B1-04), TR+65 (SS1-B1-03), TR+68 (SS1-B1-14)

1. Follow the red arrowed line below. The path shown below is on Level B2.
 - a. If you are going from TR+61 to TR+151, take a lift down to Level B2 and then follow the red arrowed line
 - b. If you are going from TR+151 to TR+61, follow the red arrowed line first till you reach the South Spine (SS) building, and then take a lift up to Level B1

