

## Conference Grand Schedule

### 2026 Joint International Conference of 17th ICSI and 3rd CODE AI

Venue: National Tsinghua University, Engineering Building I

| Date              | Time        | Program                                                                                                                                                       | Locations             |
|-------------------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| 2026/7/17<br>Fri. | 09:00-16:30 | Pre-conference Technical Tour                                                                                                                                 |                       |
| 2026/7/18<br>Sat. | 08:30-09:00 | Local Registration                                                                                                                                            | 107                   |
|                   | 09:00-09:30 | Opening Ceremony & Introduction                                                                                                                               |                       |
|                   | 09:30-10:00 | Local group photo (Remote participants send photos in advance)                                                                                                |                       |
|                   | 10:00-10:40 | Keynote A: How Much Confidence Do We Have for GenAI-Based Reasoning—A Perspective from Reliability Inference<br>By: Prof. Steven Li Host: Prof. W.C. Yeh      |                       |
|                   | 10:40-11:00 | Morning Break                                                                                                                                                 |                       |
|                   | 11:00-11:35 | Keynote B: A Proposed Closed-Loop Agentic AI Framework for Effective Academic Workflows<br>By: Prof. W.C. Yeh Host: Prof. Hsin Rau                            | 102,103,<br>104(GCSI) |
|                   | 11:35-12:00 | Special Talk: Engineering Without Boundaries: Building Universities for a Next Generation Quantum-Ready future<br>By: Prof. Iven Jose Host: Prof. Dayananda P |                       |
|                   | 12:00-13:00 | Lunch Break                                                                                                                                                   |                       |
|                   | 13:00-14:40 | Parallel Technical Sessions (2) & GCSI Project Competition (1)                                                                                                |                       |
|                   | 14:40-15:00 | Afternoon break                                                                                                                                               |                       |
|                   | 15:00-16:40 | Parallel Technical Sessions (2) & GCSI Project Competition (1)                                                                                                |                       |
|                   | 16:50-17:40 | Campus tour (Tsing Hua University) Meeting @ first floor entrance                                                                                             |                       |
| 2026/7/19<br>Sun. | 09:00-10:20 | Parallel Technical Sessions (3)                                                                                                                               | 102,<br>103,<br>104   |
|                   | 10:20-10:40 | Morning break                                                                                                                                                 |                       |
|                   | 10:40-12:00 | Parallel Technical Sessions (3)                                                                                                                               |                       |
|                   | 12:00-13:00 | Lunch break                                                                                                                                                   | 102,<br>103           |
|                   | 13:00-14:40 | Parallel Technical Sessions (2)                                                                                                                               |                       |
|                   | 14:40-15:10 | Afternoon break 1                                                                                                                                             | 106                   |
|                   | 15:10-16:00 | Keynote C: Automating ARIZ with Large Language Models: Toward AI-Assisted Inventive Problem Solving<br>By: Prof. Denis Cavallucci Host: Prof. D. Daniel Sheu  |                       |
|                   | 16:00-16:30 | Keynote D: AI, Systematic Innovation and the Coming Trough of Disillusionment<br>By: Prof. Darrell Mann Host: Prof. D. Daniel Sheu                            |                       |
|                   | 16:30-16:40 | Afternoon break 2                                                                                                                                             |                       |
|                   | 16:40-17:10 | Closing ceremony & awards                                                                                                                                     |                       |

Note: All times are in Taipei time which is GMT+8, 8 hours ahead of Greenwich time.

## **The conference links**

Find the meeting rooms of your interesting sessions and locate the corresponding internet links here. Click on the corresponding link or invoke **Microsoft Teams Meeting** and enter Meeting Number to enter each session. Local participants are encouraged to participate on-site while remote participants are to meet on-line.

All Sessions & Project reports - online meeting links:

| <b>Meetings Room</b>                                                                 | <b>Participant/Author Meetings link - <u>Microsoft Teams Meeting</u><br/><a href="https://www.microsoft.com/en-us/microsoft-teams/join-a-meeting">https://www.microsoft.com/en-us/microsoft-teams/join-a-meeting</a></b> |                                                      |
|--------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|
| Opening Ceremony/<br>Keynote/ Special Talk/<br>Closing Ceremony**<br>(Room-107 /106) | <a href="https://teams.microsoft.com/meet/4654191803641?p=C3w1ny6DumUfhTRZQ3">https://teams.microsoft.com/meet/4654191803641?p=C3w1ny6DumUfhTRZQ3</a>                                                                    | Meeting ID: 465 419 180 364 1<br>Passcode: 3Yx7jr2D  |
| GCSI- Project report:<br>(Room-104)<br>Paper report:<br>(Room-104 /106)              |                                                                                                                                                                                                                          |                                                      |
| Paper report:<br>(Room-102)                                                          | <a href="https://teams.microsoft.com/meet/49906429300354?p=8H268ydZtOTc8jdJ3N">https://teams.microsoft.com/meet/49906429300354?p=8H268ydZtOTc8jdJ3N</a>                                                                  | Meeting ID: 499 064 293 003 54<br>Passcode: xm6fg7Rj |
| Paper report:<br>(Room-103)                                                          | <a href="https://teams.microsoft.com/meet/44816965827515?p=JcTgKZP2THRoV7c6hJ">https://teams.microsoft.com/meet/44816965827515?p=JcTgKZP2THRoV7c6hJ</a>                                                                  | Meeting ID: 448 169 658 275 15<br>Passcode: Qy62mb2R |

\*\*Plenary Sessions: Opening Ceremony/Keynote/Special Talk/Closing Ceremony

## 2026 Paper Parallel Sessions

### Paper Parallel Sessions

#### List of Session Chairs:

| 2026/7/18 (Sa) | Parallel Sessions | Session chairs: |                 |
|----------------|-------------------|-----------------|-----------------|
| 13:00-14:40    | D1S1-Room-102     | Hareesh K S     | Manasa C M      |
|                | D1S2-Room- 103    | Madhura K       | Snigdha Sen     |
| 15:00-16:40    | D1S3-Room- 102    | Hsin Rau        | Shan-Yang Wang  |
|                | D1S4-Room- 103    | Yu-Gang Chen    | Chih-Hsien Chen |

| 2026/7/19 (Su) | Parallel Sessions | Session chairs: |                  |
|----------------|-------------------|-----------------|------------------|
| 09:00-10:20    | D2S1-Room-102     | Hareesh K S     | Manohara Pai M M |
|                | D2S2-Room-103     | Wei-Chang Yeh   | Liang Hui Wang   |
|                | D2S3-Room-104     | Shreyas J       | Rajendra A. B.   |
| 10:40-12:00    | D2S4-Room-102     | Yu-Ming Fei     | Liang Hui Wang   |
|                | D2S5-Room-103     | Won-Shik Shin   | Shu-Hsien Tai    |
|                | D2S6-Room-104     | Hsin Rau        | An-Jin Shie      |
| 13:00-14:40    | D2S7-Room-102     | De-Chih Lee     | An-Jin Shie      |
|                | D2S8-Room-103     | Yu-Ming Fei     | Shu-Hsien Tai    |

**ICSI Parallel Sessions (Presentation: 18 minutes; Q&A: 2 minutes.)**

**Date/time: 2026/7/18 (Sat) , PM 13:00-14:40; Sessions/ Location: D1S1-Room-102**

**Session chair: Hareesh K S ; Co-Chair: Manasa C M**

| ID | Paper Title                                                                                                                | Author(s)                              |
|----|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| 8  | Study on the Relational Structure of the 40 Inventive Principles in the TRIZ Contradiction Matrix through Network Analysis | Won-Shik Shin                          |
| 7  | A Cross-Theoretical Framework for Selecting Training Methods for New Employees in Manufacturing Contexts                   | Shian Un Hung, Koichi Murata           |
| 34 | Strategic Evaluation for Aviation's Net-Zero 2050: Integrating IATA Enabling Decisions and AHP-BN Model Analysis           | Pei-Chieh Wu, Hsin Rau, ShangHung Yang |
| 22 | An Innovative Design on Intelligent Ecological Bird-Repelling System for Airports                                          | Chenyang Qu                            |
| 10 | Is TRIZ Ready for Computational Inventiveness                                                                              | Koray Altun                            |

**Date/time: 2026/7/18 (Sat) , PM 13:00-14:40; Sessions/ Location: D1S2-Room-103**

**Session chair: Madhura K ; Co-Chair: Snigdha Sen**

| ID | Paper Title                                                                                                                             | Author(s)                                                                           |
|----|-----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 29 | Fibrous Future: Transforming Abaca Pseudo-Stem Waste into Sustainable Industrial Fiber and Crafts                                       | Herguim Al Mangaliwan, Joanne Sonido, Norvie Penas, Tien-Ting, Chiu                 |
| 30 | AGROVER: A SMART MICRO-MISTING CROP ROVER: EDGE-COMPUTING ROBOTICS FOR TARGETED HEAT-STRESS PROTECTION IN SMALL-SCALE SUBTROPICAL FARMS | Angelo Matibag, Daniela Erika Bravo, Althea Ocariz, Jeric Gementiza, Tien-Ting Chiu |
| 35 | Innovative Research on Fishing Hooks Based on TRIZ                                                                                      | Chen, Chih-Hsien, Chen, Mei-Hei, Lin, Wen-Yi                                        |
| 16 | Analysis Models and Quantitative Analysis Methods of Flow Analysis                                                                      | Liu Yongmou                                                                         |
| 18 | A Novel Service Quality Diagnostic Method Based on CNN-Driven Facial Emotion Analysis                                                   | An-Jin Shie, Qilin Yang, Jialiang Chen, En-Min Xu, Ching-Hung Lee                   |

**Date/time: 2026/7/18 (Sat) , PM 15:00-16:40; Sessions/ Location: D1S3-Room-102**

**Session chair: Hsin Rau ; Co-Chair: Shan-Yang Wang**

| ID    | Paper Title                                                                                                                                                 | Author(s)                                                        |
|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| 11    | A GIS-Based Machine Learning Framework for Assessing the Relationship Between Urban Growth and Climate Change: A District-Level Zoning of Tehran Metropolis | Kheyroddin Reza, Ahmadnia Amirali                                |
| I-253 | Dynamic Hyper-Personalization in Financial Services Using Deep Temporal Clustering and Reinforcement Learning                                               | Ilham Huseyinov, Hassani Selemani Kanju, Rand Kouatly, Mhd Wasim |
| I-249 | Token-RVFormer: A Token-Level Variational Fusion Transformer for Efficient Uncertainty-Aware Medical Time-Series Prediction                                 | Ahmed Abeideh, Ilham Huseyinov, Rand Kouat-ly                    |
| I-183 | Attention Guided dual CNN feature Extractor with Stacked Ensemble for the Weed Detection                                                                    | Vishnesh Reddy Patlolla, Manasa C M                              |
| I-194 | Variance-based XGBoost Framework for Transcriptomic Prediction of TCMR and ABMR in Kidney Transplantation                                                   | Kruthika G, Joshika K, Pooja G K, Manjunath B Talawar            |

**Date/time: 2026/7/18 (Sat) , PM 15:00-16:40; Sessions/ Location: D1S4-Room-103**

**Session chair: Yu-Gang Chen ; Co-Chair: Chih-Hsien Chen**

| ID    | Paper Title                                                                                                                                 | Author(s)                                                                                |
|-------|---------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| 31    | PLANT-BASED PEST CONTROL USING TINOSPORA CRISPA: MINIMIZING CHEMICAL AND ENVIRONMENTAL HAZARDS                                              | Lady Diane Logrono, Hezel Joy Diagdall, Leah Jane Candelario, Tien-Ting Chiu             |
| 32    | SUSTAINABLE VALORIZATION OF RICE STRAW: ARTIFICIAL INTELLIGENCE-AUGMENTED GREEN BAGS                                                        | Rowena Dela Torre, Maria Rowella Rivera, Shara Gia Lampara, Tien-Ting Chiu               |
| I-25  | Systematic Identification of Flaky Test Case using CodeBERT based Hybrid Autoencoder                                                        | Sambit Kumar Mitra, Shreya Banerjee, Snigdha Sen                                         |
| I-135 | Machine Learning–Based Prediction of Functional Outcomes in Spontaneous Intracerebral Hemorrhage: Insights from a South Indian Cohort Study | Sandra Sony, Hareesha K. S., Girish Menon, Ajay Hegde, Sanjana Muthukumar and Shashank H |
| I-150 | Sickle Cell Vision: Performance Evaluation of Deep Learning Models in Hematological Imaging                                                 | Dr. Madhura K, Ms. Arunima Manna, Dr. Shweta S Aladakatti                                |

**Date/time: 2026/7/19 (Sun) , AM 09:00-10:20; Sessions/ Location: D2S1-Room-102**

**Session chair: Hareesh K S ; Co-Chair: Manohara Pai M M**

| ID    | Paper Title                                                                                                                       | Author(s)                                                                                                                                |
|-------|-----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| I-231 | Hybrid Fuzzy Q-Learning Based Energy-Aware Duty Cycle Scheduling for Wireless Sensor Networks                                     | Shivakumar M K and Dr. A B Rajendra                                                                                                      |
| 4     | From Waste Identification to Contradiction Resolution: Integrating Lean Management and TRIZ for Manufacturing Process Improvement | Jeng-Ye Jung,<br>Chia-Chen Yu,<br>Yi-Ting Lin,<br>Wen-Ting Dai,<br>Ji-Chyuan Liou,<br>Wei-Hung Chen,<br>Chun-Tai Wang,<br>Ying-Zhi Zhang |
| 27    | Methods to identify and analyze unaware failure modes                                                                             | D. Daniel Sheu,<br>Chun-Liang Hsu                                                                                                        |
| 25    | From Estimation Bias to Intelligent Decision-Making: An AI-Based Risk Assessment Framework for Solar Power Systems                | Ji-Chyuan Liou,<br>Yu-Ming Fei,<br>Wei-Yan Wang                                                                                          |

**Date/time: 2026/7/19 (Sun) , AM 09:00-10:20; Sessions/ Location: D2S2-Room-103**

**Session chair: Wei-Chang Yeh ; Co-Chair: Liang Hui Wang**

| ID              | Paper Title                                                                                                                                                                                                                              | Author(s)                                                         |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 33              | Behavioral Motivation Observations in Patients with Mild Dementia                                                                                                                                                                        | Shan-Yang Wang                                                    |
| 28              | Application of Systematic Innovation Methods in the Design and Implementation of Festival Meals for the Elderly: A Case Study of Healthy Rice Dumplings for the Dragon Boat Festival                                                     | Shu-Hsien CHANG,<br>Shu-Yen YANG                                  |
| 6               | Integrating Semantic Analysis and TRIZ Characteristics into a Problem-Solving and Patent Knowledge Extraction Framework                                                                                                                  | Tien-Lun Liu,<br>Sheng-Kai Yang,<br>Chien Lin                     |
| 3               | Coupled Crystallization-Phase Separation and Upper Critical Solution Temperature Behavior of Zwitterionic Monomers in Biodegradable Polymer Blend Systems                                                                                | Nina Hsieh                                                        |
| 37<br>(Chinese) | Synergistic Mechanism of Ganoderma lucidum as "King of Herbs" and "Guide to Medicinal Herbs" in Multi-Target Regulation and Pharmacokinetics: A Biomedical Deconstruction Based on the Principles of Systematic Innovation and Invention | Xiao- Xu Wen,<br>Sheng-Zhou Xu,<br>Li-Yuan Chen,<br>Hong-Rui Chen |

**Date/time: 2026/7/19 (Sun) , AM 09:00-10:20; Sessions/ Location: D2S3-Room-104**

**Session chair: Shreyas J ; Co-Chair: Rajendra A. B.**

| ID | Paper Title                                                                                                                                                | Author(s)                  |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|
| 15 | Resolving Design Contradictions in Airway Management Devices: Development of a Channeled Miniature AI Videolaryngoscope Using TRIZ Evolutionary Principles | Ya-Ying Hsiao, Yu-Ming Fei |
| 13 | Research on an AI-Assisted Employee Health Management System                                                                                               | Sin-Yi, Lin                |
| 12 | A Comparative Study of Rule-Based and AI Chatbots: Taking Graduate Administrative Affairs as the Application Scenario                                      | Wei-Xiang Liao, Yu-Min Fei |
| 14 | A Three-Layer AI Voice Verification Pipeline for Game-Based Corrective-Rule Production in TOEIC Grammar Learning: A Pilot Feasibility Study                | Dang, Ngoc Kien            |

**Date/time: 2026/7/19 (Sun) , AM 10:40-12:00; Sessions/ Location: D2S4-Room-102**

**Session chair: Yu-Ming Fei ; Co-Chair: Liang Hui Wang**

| ID    | Paper Title                                                                                                       | Author(s)                                                                              |
|-------|-------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| I-180 | Enhanced State of Health Prediction for Lithium-Ion Batteries Using BiLSTM with Multihead Attention               | Shreya Nayak, Manohara Pai M M, Pravallika Srinivas Gajul, Rohint R Rao, Radhika M Pai |
| 24    | Establishing predictors of physical and mental functionalities of the aged by their heart rate variability        | Yuan-Ping Chang, De-Chih Lee                                                           |
| 17    | A Proactive Elderly Long-Term Care Allocation Framework via Substance-Field Analysis and Multi-Level Metamodeling | Wan-Chiao Chen, Hsin Rau                                                               |
| 9     | Constructing a Value Co-Creation Writing System Integrating Generative AI and Human Wisdom                        | Koichi Murata, Hung Shian Un, D. Daniel Sheu                                           |
| I-221 | DWT-Based Deep Learning Framework for Osteoporosis Image Classification using X-ray Femur Bone                    | Anusha K L and Chetana Srinivas                                                        |

**Date/time: 2026/7/19 (Sun) , AM 10:40-12:00; Sessions/ Location: D2S5-Room-103**

**Session chair: Won-Shik Shin ; Co-Chair: Shu-Hsien Tai**

| ID   | Paper Title                                                                                                  | Author(s)                                                                                 |
|------|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| 36   | BAT-Refined LLM-TRIZ: Structural Verification and Content-Claim Risk Assessment for Reliable TRIZ Reasoning  | Wei-Chang Yeh, D. Daniel Sheu                                                             |
| I-78 | Hybrid Cox–DeepSurv Framework for Interpretable Survival Prediction in Clinical Data                         | Muthulakshmi K, Gopalakrishnan T, Rashmi S                                                |
| I-97 | A Novel Cross-Modal Attention Fusion Framework for Multimodal Healthcare Diagnosis Using Swin Transformer V2 | Karthik S A, Shreenidhi B S, Chaitra P C, Sarath Chandra, Priya Nandihal, Navya Lakshmana |
| I-34 | Enhancing Colorectal Cancer Diagnosis Using Deep Learning: A Comprehensive Review                            | Kusum Rajput, Vamshi Krishna B, Dr. Pamela Vinitha Eric                                   |

**Date/time: 2026/7/19 (Sun) , AM 10:40-12:00; Sessions/ Location: D2S6-Room-104**

**Session chair: Hsin Rau ; Co-Chair: An-Jin Shie**

| ID    | Paper Title                                                                                                                               | Author(s)                                              |
|-------|-------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| 26    | Automated Sustainability Report Generation System Based on Fine-Tuning Large Language Models                                              | Yao-Lun Xuu, Yu-Kai Huang, Kai-An Tsai, Shu-Hsien Tai  |
| 21    | AN ANALYSIS OF TAIWANESE DISTILLERY TOURISM EXPERIENCES USING LDA AND TRIZ                                                                | Tsai-Chieh Lee, Yu-Ming Fei                            |
| I-226 | Hybrid Edge-Cloud AI Framework for Real-Time Electro-Thermal Monitoring and Predictive Maintenance in Electric Vehicle Powertrain Systems | Bharath S, Gireesh Babu C N, Shoba M, Sagargouda Patil |
| I-201 | Temporal Triangulation: A Network-Theoretic Framework for Source Identification in the Ethereum DevP2P (Execution Layer)                  | Tanmay Vemuri, Dr. Ignisha Rajathi G                   |
| I-222 | FPGA-Based Secure Image Encryption using Multi-layer Reversible Computing Algorithm                                                       | POOJA S BAGALI, SAPNA P. J                             |

**Date/time: 2026/7/19 (Sun) , PM 13:00-14:40; Sessions/ Location: D2S7-Room-102**

**Session chair: De-Chih Lee; Co-Chair: An-Jin Shie**

| ID    | Paper Title                                                                                                                                       | Author(s)                                                             |
|-------|---------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| I-230 | Rule-Based Optimal Energy Harvester Selection for Sustainable Wireless Sensor Networks                                                            | Priyanka Mohan,<br>A B Rajendra                                       |
| I-153 | AI-Powered ECG Signal Denoising using Residual Variational Autoencoder with Dual Attention                                                        | Thanuja M, Soumyashree M<br>Panchal, Prasanna Lakshmi<br>G. S         |
| I-208 | Intelligent Border Surveillance System: Machine Learning Approaches to Intrusion Detection, Threat Level Scoring, and Sensor Integrity Monitoring | Nayandeep Mohanty,<br>Ashwitha A, Anitha P,<br>Ambika B J, Pavithra N |
| I-175 | Disc-level 3D Multi-Task Learning for Degenerative Spine Disease Using Volumetric MRI                                                             | Kiran P S, K. Chandan                                                 |

**Date/time: 2026/7/19 (Sun) , PM 13:00-14:40; Sessions/ Location: D2S8-Room-103**

**Session chair: Yu-Ming Fei ; Co-Chair: Shu-Hsien Tai**

| ID    | Paper Title                                                                                                        | Author(s)                                                                               |
|-------|--------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| I-57  | Enhancing Stroke Diagnosis: A Deep Learning Approach to Analyze Neuroimages                                        | Pavithra N, Charan<br>Arunkumar Raikar, Sharath<br>Kumar Y H, Nandeesh S<br>Mysore Matt |
| I-73  | YOLO-based Models for Breast Cancer Detection using Ultrasound Imaging                                             | Rajesh Natarajan, Sujatha<br>Krishna, Anitha P, Ashwitha<br>A, Kshama S B               |
| I-301 | Predictive Digital Twin model for accounting and achieving minimal carbon emission for urban residential buildings | Dr. Sudaroli Dhananjeyan,<br>Alexander R, R. Reni Hena<br>Helan, Vanidha Sri R          |
| I-302 | A Phase-Aware Microscaling Datapath for FPGA-Accelerated Reinforcement Learning from Human Feedback                | Aditya Patel                                                                            |

## **GCSI Project Presentation Sessions**

**GCSI Competition Chairs: William Wu**

**Judges: Gururaj H L, Koichi Murata, D. Daniel Sheu, W.C. Yeh**

**Sessions: GCSI Project, Location: Room 104**

**GCSI Project Presentation: 18 minutes; Q&A: 2 minutes.**

**Date/time: 2026/7/18 (Sat) , PM 13:00-14:40**

| ID  | Project Title                                                                                                                                   | Team member(s)                                                                             |
|-----|-------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| G-1 | Design and Implementation of a CONWIP-Based Pull System for Truck Parts Manufacturing: An Integrated Approach Using LSS, TRIZ, and Digital Twin | Li Ting Lin, Chen Han Chen, Shih Hsien Tseng, Yi Fei Chen                                  |
| G-2 | All you can see - Smart Workstation Design                                                                                                      | Tien-Lun Liu, Kang-I Liu, Hsiang-Yun Chen                                                  |
| G-4 | A sustainability report generation system based on a large language model                                                                       | Yao-Lun Xuu, Yu-Kai Huang, Kai-An Tsai, Shu-Hsien Tai                                      |
| G-5 | A Two-Degree-of-Freedom Stretching Assistive Device for Frozen Shoulder Rehabilitation                                                          | Yu-Gang Chen, Chang-Yuan Chen                                                              |
| G-6 | Human–AI Interaction in English Education: A Task-Based Learning Framework                                                                      | Chia-Chien Liao, Chia-Chun Wang, Chih-Chen Hsu, Li-Ling Liao, Wan-Jhen Jhuei, Yu-Ching Hsu |

**Date/time: 2026/7/18 (Sat) , PM 15:00-16:40**

| ID   | Project Title                                                                                                                   | Team member(s)                                                                                                                                           |
|------|---------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| G-7  | Remember Together: Student Co-Creation of Reminiscence Activities to Promote Communication and Healthy Aging Among Older Adults | Liang Hui Wang, Chi-gin Chen, Yun Shiuan Lin, Wan Yu Chou, Jing Han Qiu                                                                                  |
| G-8  | A TRIZ-based Systematic Innovation Approach to Improving the Oral Functional Care Brush for Older Adult Care                    | Jo-Peng Tsai, Liang-Hui Wang, Chien-Hsin Yeh, Kazuaki Harada, Su-Chihi Kue, Yan-Ru Lin, Hsiu-Wen Wang, Shenghan Wang                                     |
| G-9  | A Systematic Innovation Process for Developing Elder-Friendly Wagashi Using TRIZ, Texture Analysis, and Sensory Evaluation      | Jo-Peng Tsai, Wan-Jung Chou, Mei-Ling Chang, Charlie Wu, Su-Chih Kuei, I-Tyne Cheng, Jia-Yun Li, Hsiu-Wen Wang, Yan-Ru Lin, Hsiu-Wen Wang, Shenghan Wang |
| G-10 | Applying systematic innovative technology to the research of fever mask design                                                  | Li Yuan Chen, Hong Rui Chen, Thi Hieu Phan                                                                                                               |
| G-3  | A Novel Service Quality Diagnostic Method Based on CNN-Driven Facial Emotion Analysis                                           | An-Jin Shie, Qilin Yang, Jialiang Chen, En-Min Xu                                                                                                        |

The Joint Conference of 17th International Conference on Systematic Innovation (ICSI & GCSI) and 3rd International Conference on Data Science & Exploration in Artificial Intelligence (CODE AI-2026).

## Campus map

Venue: Engineering Building I, National Tsinghua University  
(No.101, Sec. 2, Guan-FU Road, Hsinchu)

Building: Engineering Building I, National Tsinghua University

National Tsinghua University Campus Map System

Chinese: <https://campusmap.cc.nthu.edu.tw/>

English: <https://campusmap.cc.nthu.edu.tw/en/>



- 7/18      Opening Ceremony/Keynote/Special Talk:107  
Parallel Sessions & GCSI Room :102 , 103 , 104
- 7/19      Keynote/ Closing Ceremony: 106  
Parallel Sessions:102 , 103 , 104

