

IEEE CISOSE 2024: Call for Tutorial Participation

Tutorials: IEEE International Congress on Intelligent and Service-Oriented Systems Engineering 2024

July 15-18, 2024, | [Minhang District, Shanghai Jiao Tong University, Shanghai 200240, China.](#)

Join us at [IEEE CISOSE 2024](#) event, this unique conference combines six international conferences, a workshop, and a summit, offering a platform for researchers and industry leaders a platform to exchange ideas on building smart systems. There will be two exclusive tutorials on **15th July 2024** focusing on AI system quality validation test automation conducted by experts:

A) [Testing and Automation for Intelligent Computer Vision and Applications](#): This comprehensive and unique tutorial (by [Dr. Jerry Gao](#)) is crucial for understanding the multifaceted challenges and evolving needs of AI system testing and quality assurance. Attendees, including test engineers, QA engineers, and managers, will learn about the latest topics:

- AI testing tools
- Automatic validation methods
- Computer vision testing case studies.
- Quality testing processes
- Model-based testing methods
- Computer vision AI test modeling
- Test generation and data augmentation

Participants will learn AI test modeling, analysis for computer vision models, and intelligent system automation improving the reliability and performance of AI-powered applications. Researchers and students interested in AI system testing are also encouraged to attend. You will be provided **two showcases and project demos** on sample computer vision automation.

B) [Datamorphic Testing: Principles, Tools and Applications to Machine Learning](#): This comprehensive and unique tutorial (by [Dr. Hong Zhu](#)) is crucial for understanding advanced testing methodologies for machine learning applications. Participants, including software testers, QA engineers, and ML developers, will learn and explore the topics:

- Datamorphic testing methodology.
- Test entities and test morphisms
- Automated datamorphic testing tool Morphy.
- Applications of datamorphic testing to machine learning models
- Benefits of high-level test scripts of automation

Attendees will benefit from learning how to effectively test ML models, ensure robustness, and handle adversarial attacks, ultimately enhancing the reliability and performance of ML applications. They will gain insights into developing comprehensive test systems using the datamorphic testing methodology, which emphasizes the explicit definition and implementation of testing processes.

Registration contact: Dr. Jerry Gao (jerry.gao@sjsu.edu)

Follow the links for more information and registration:



Summit



CISOSE



Registration

Learn more: <https://www.youtube.com/watch?v=eBvwrZvjySM>