QRS 2023 Session Schedule

All the sessions are based on the time in Chiang Mai, Thailand (UTC+7)

Conference Venue [Website]
Le Méridien Chiang Mai, Chiang Mai, Thailand
108 Changklan Rd, Tambon Chang Moi, Mueang Chiang Mai District, Chiang Mai 50100, Thailand  [Map]

- 4th Floor: Suthep Hall 3 (Plenary Session) and Suthep Hall 2 (lunch)
- 3rd Floor: Expedition Room, Journey Room, Excursion Room, and Passage Room

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td>07:45 – 08:30</td>
<td>Registration</td>
<td>Foyer (4th FL)</td>
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<tr>
<td>08:30 – 08:45</td>
<td>Opening Ceremony</td>
<td>Suthep Hall 3</td>
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<tr>
<td>(15 minutes)</td>
<td>Steering Committee Chair (Host)</td>
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<tr>
<td></td>
<td>- W. Eric Wong (University of Texas at Dallas)</td>
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<td></td>
<td>General Chair</td>
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<td></td>
<td>- Suphamit Chittayasothorn (King Mongkut’s Institute of Technology Ladkrabang, Thailand)</td>
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<td>- He Jiang (Dalian University of Technology, China)</td>
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<td>Program Chairs</td>
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<td></td>
<td>- Mercedes G. Merayo (Universidad Complutense de Madrid, Spain)</td>
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<td>- Bixin Li (Southeast University, China)</td>
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<td>- András Pataricza (Budapest University of Technology and Economics, Hungary)</td>
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<tr>
<td>08:45 – 09:35</td>
<td>Keynote Speech I</td>
<td>Suthep Hall 3</td>
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<tr>
<td>(50 minutes)</td>
<td>Recent Advances in Debugging Spreadsheets</td>
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<td></td>
<td>Professor Franz Wotawa</td>
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<td></td>
<td>Head of the Institute for Software Technology</td>
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<td>Graz University of Technology</td>
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<td>Austria</td>
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<tr>
<td>09:35 – 10:25</td>
<td>Keynote Speech II</td>
<td>Suthep Hall 3</td>
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<tr>
<td>(50 minutes)</td>
<td>Challenges in the Era of Large Models for System Reliability</td>
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<tr>
<td></td>
<td>Dr. Zheng Hu</td>
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<td>Director of Reliability Technology Lab</td>
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<td>Huawei Technologies</td>
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<td>10:25 – 11:00</td>
<td>Coffee Break</td>
<td>Foyer (3rd FL)</td>
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<tr>
<td>11:00 – 12:20</td>
<td>Session I-A: Software Testing I (4 papers)</td>
<td>Expedition</td>
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<td>(80 minutes)</td>
<td>Session I-B: AI and Security (4 papers)</td>
<td>Journey</td>
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<td>Session I-C: Software Defect Prediction I (3 papers)</td>
<td>Excursion</td>
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<td>Session I-D: Software Bug Analysis and Localization (4 papers)</td>
<td>Passage</td>
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<tr>
<td>12:20 – 13:40</td>
<td>Lunch</td>
<td>Suthep Hall 2</td>
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<tr>
<td>(100 minutes)</td>
<td>Session II-B: Security and Vulnerability (5 papers)</td>
<td>Journey</td>
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<td>Session II-C: Software Defect Prediction II (4 papers)</td>
<td>Excursion</td>
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<td>Session II-D: Machine Learning for Anomaly Detection (5 papers)</td>
<td>Passage</td>
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<tr>
<td>15:20 – 15:50</td>
<td>Coffee Break</td>
<td>Foyer (3rd FL)</td>
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<tr>
<td>15:50 – 17:30</td>
<td>Session III-A: Software Testing III (5 papers)</td>
<td>Expedition</td>
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<tr>
<td>(100 minutes)</td>
<td>Session III-B: Cybersecurity Measures and Threat Mitigation (5 papers)</td>
<td>Journey</td>
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<td>Session III-C: Software Defect Detection (5 papers)</td>
<td>Excursion</td>
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<td>Session III-D: Software Performance and Fault Injection (4 papers)</td>
<td>Passage</td>
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<td>17:30 – 18:30</td>
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<tr>
<td>18:30 – 20:30</td>
<td>Reception</td>
<td>Suthep Hall 2</td>
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### Tuesday, October 24, 2023

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<thead>
<tr>
<th>Time</th>
<th>Session/Activity</th>
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<tr>
<td>08:00 – 08:30</td>
<td>Registration</td>
<td>Foyer (3rd FL)</td>
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<tr>
<td>08:30 – 10:10 (100 minutes)</td>
<td>Session IV-A: Software Testing IV (4 papers)</td>
<td>Expedition Journey</td>
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<td>Session IV-B: AI for Software Development, Testing, and Verification (6 papers)</td>
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<td>Session IV-C: Software Quality Assessment (4 papers)</td>
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<td>Session IV-D: Smart Contracts and Blockchain I (5 papers)</td>
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<td>10:10 – 10:40</td>
<td>Coffee Break</td>
<td>Foyer (3rd FL)</td>
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<td>10:40 – 12:20 (100 minutes)</td>
<td>Session V-A: Software Testing V (4 papers)</td>
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<td>Session V-B: Evaluation and Application of Large Language Models (4 papers)</td>
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<td>Session V-C: Safety Analysis and Privacy (5 papers)</td>
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<td>Session V-D: Smart Contracts and Blockchain II (5 papers)</td>
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<td>12:20 – 13:40</td>
<td>Lunch</td>
<td>Suthep Hall 2</td>
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<td>13:40 – 15:20 (100 minutes)</td>
<td>Session VI-A: Natural Language Processing I (4 papers)</td>
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<td>Session VI-B: Programming Code Analysis I (4 papers)</td>
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<td>Session VI-C: Predictive Modeling and Evaluation (5 papers)</td>
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<td>Session VI-D: Cyber Forensics, Security, and E-Discovery I (4 papers)</td>
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<td>15:20 – 15:50</td>
<td>Coffee Break</td>
<td>Foyer (3rd FL)</td>
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<tr>
<td>15:50 – 17:30 (100 minutes)</td>
<td>Session VII-A: Natural Language Processing II (5 papers)</td>
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<td>Session VII-B: Programming Code Analysis II (4 papers)</td>
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<td>Session VII-C: Mobile App and Software Aging Analysis (5 papers)</td>
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<td>Session VII-D: Cyber Forensics, Security, and E-Discovery II (4 papers)</td>
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<td>17:30 – 18:30</td>
<td>Recess</td>
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<tr>
<td>18:30 – 20:30</td>
<td>Conference Banquet</td>
<td>Suthep Hall 2</td>
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1Each paper (except for Fast Abstracts) has 20 minutes including Q/A.
2Zoom links for online presentations are in the detailed program.
"The password for all video presentation links is “QRS2023”.

### Wednesday, October 25, 2023

<table>
<thead>
<tr>
<th>Time</th>
<th>Session/Activity</th>
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<tr>
<td>08:00 – 08:30</td>
<td>Registration</td>
<td>Foyer (3rd FL)</td>
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<tr>
<td>08:30 – 10:10 (100 minutes)</td>
<td>Session VIII-A: Automated and Intelligent Software Testing (5 papers)</td>
<td>Expedition Journey</td>
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<td>Session VIII-B: Empirical Software Engineering and Art Smart Contract I (4 papers)</td>
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<td>Session VIII-C: Peer-to-Peer and Cloudlet Technologies (5 papers)</td>
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<td>Session VIII-D: Safety and Security in Cyber-Physical Systems (5 papers)</td>
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<tr>
<td>10:10 – 10:40</td>
<td>Coffee Break</td>
<td>Foyer (3rd FL)</td>
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<tr>
<td>10:40 – 12:20 (100 minutes)</td>
<td>Session IX-A: Creative Computing (4 papers)</td>
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<td>Session IX-B: Empirical Software Engineering and Art Smart Contract II (4 papers)</td>
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<td>Session IX-C: Workflow Analysis and AI Controllers (4 papers)</td>
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<td>Session IX-D: Fast abstract I (7 papers)</td>
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<tr>
<td>12:20 – 13:40</td>
<td>Lunch</td>
<td>Suthep Hall 2</td>
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<td>Session X-B: Data Driven Base Decision Making for Software Engineering (4 papers)</td>
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<td>Session X-C: Machine Learning for Verification (4 papers)</td>
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<td>Session X-D: Fast abstract II (7 papers)</td>
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<tr>
<td>15:20 – 15:50</td>
<td>Coffee Break</td>
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1Each paper (except for fast abstracts) has 20 minutes including Q/A.
2Each fast abstract has 15 minutes including Q/A.
3Zoom links for online presentations are in the detailed program.
"The password for all video presentation links is “QRS2023”.
Paper presentations at QRS 2023 can be in-person at the conference venue or online via Zoom.

If a paper is to be presented online, authors of each paper must also follow the instructions to submit a 15-min video. If a live stream presentation of a paper is not possible, a pre-recorded video submitted by the author will be played.

IEEE requires conference organizers to report “no show” papers that will be removed from the proceedings. Hence, it is important that each accepted paper is presented either in-person or online.

Links for Zoom presentations:

- **QRS 2023: Plenary Session & Session A**
  
  [https://us06web.zoom.us/j/86131366851?pwd=gcu1v3VNmaIjwrrqWP8br72sadPQ1c.1](https://us06web.zoom.us/j/86131366851?pwd=gcu1v3VNmaIjwrrqWP8br72sadPQ1c.1)

  Meeting ID: 861 3136 6851
  Passcode: QRS2023

- **QRS 2023: Session B**
  
  [https://us06web.zoom.us/j/87646019767?pwd=ecLJGDFdzLIn7Um2h74rVPBk7alqey.1](https://us06web.zoom.us/j/87646019767?pwd=ecLJGDFdzLIn7Um2h74rVPBk7alqey.1)

  Meeting ID: 876 4601 9767
  Passcode: QRS2023

- **QRS 2023: Session C**
  
  [https://us06web.zoom.us/j/88365830462?pwd=a3OIlA3rdHw6CYcyMQUXUjojwRl9L.1](https://us06web.zoom.us/j/88365830462?pwd=a3OIlA3rdHw6CYcyMQUXUjojwRl9L.1)

  Meeting ID: 883 6583 0462
  Passcode: QRS2023

- **QRS 2023: Session D**
  
  [https://us06web.zoom.us/j/88013903153?pwd=MFgis9vTKZtvboWvViaiq1fNBf0Fm.1](https://us06web.zoom.us/j/88013903153?pwd=MFgis9vTKZtvboWvViaiq1fNBf0Fm.1)

  Meeting ID: 880 1390 3153
  Passcode: QRS2023

Track A includes all the tracks ending with A, i.e., I-A, II-A, III-A, IV-A, V-A, VI-A, VII-A, VIII-A, IX-A, and X-A. Similarly, Track B, C, and D include all the tracks ending with B, C, and D, respectively.
QRS 2023 Presentation Schedule: Day 1

All the sessions are based on the time in Chiang Mai, Thailand (UTC+7)

Paper IDs in this preliminary version will not appear in the final version. They are only used for internal bookkeeping.

Monday, October 23, 2023 (11:00 – 12:20)

I-A: Software Testing I (4 papers)

- R093-Using Data Abstraction for Clustering in the Context of Test Case Generation
- R223-The Comparative Evaluation of Test Prioritization Approaches in an Industrial Study
- R214-Test Case Generation for Autonomous Driving Based on Improved Genetic Algorithm
- R191-Investigating Execution Trace Embedding for Test Case Prioritization

I-B: AI and Security (4 papers)

- R061-MAD: One-Shot Machine Activity Detector for Physics-Based Cyber Security
- S042-AI and Security - What changes with generative AI
- R174-VMCANARY: Effective Memory Protection for WebAssembly via Virtual Machine-assisted Approach
- R074-IMCSCL: Image-Based Malware Classification using Self-Supervised and Contrastive Learning

I-C: Software Defect Prediction I (3 papers)

- R009-A Framework based on Deep Neural Network for Ranking-oriented Software Defect Prediction
- R071-FINDGATE: Fine-grained Defect Prediction Based on a Heterogeneous Discrete Code Graph-Guided Attention Transformer
- AIST006-Enhancing Cross-Project Just-In-Time Defect Prediction with Active Deep Learning

I-D: Software Bug Analysis and Localization (4 papers)

- S009-PRCMHFL: A Fault Localization technique based on Predicate Ranking and CMH method
- R198-Toward Understanding Bugs in Swift Programming Language
- R119-Enhancing Fault Localization by incorporating Statement Frequency and Test Case Contribution
- R158-Understanding Bugs in Rust Compilers

Monday, October 23, 2023 (13:40 – 15:20)

II-A: Software Testing II (5 papers)

- R015-Efficient Fuzz Testing of Web Services
- S015-Metamorphic Testing for the Deepfake Detection Model
- R028-Uncertainty-Aware Metamorphic Testing for Robust Object Detection Models
- HASQ003-Requirements-driven Logic Testing for Deep Neural Networks
- AIST001-Metamorphic Testing for Traffic Sign Detection and Recognition

II-B: Security and Vulnerability (5 papers)

- R032-Natch: Detecting Attack Surface for Multi-Service Systems with Hybrid Introspection
- R220-Cancelable Iris Biometrics based on Transformation Network
- R227-Vulnerability Detection-Oriented Data Augmentation Using Approximate Nearest Neighbor
- R063-Dynamic Access Control with Administrative Obligations: A Case Study
- S011-Familial Graph Classification of Malware based on Structured API Call Sequences
II-C: Software Defect Prediction II (4 papers)

- R110-SyntaxLineDP: a Line-level Software Defect Prediction Model based on Extended Syntax Information
- R193-JITBoost: Boosting Just-In-Time Defect Prediction Using Boolean Combination of Classifiers
- R117-A study on the impact of pre-trained model on Just-In-Time Defect Prediction
- AIST007-Comparative Study of Ensemble Learning Methods in Just-In-Time Software Defect Prediction

II-D: Machine Learning for Anomaly Detection (5 papers)

- R134-Online Data Drift Detection for Anomaly Detection Services based on Deep Learning towards Multivariate Time Series
- R181-Log-based Anomaly Detection of Enterprise Software: An Empirical Study
- R016-Anomaly Detectors for Self-Aware Edge and IoT Devices
- R116-LGLog: Semi-supervised Graph Representation Learning for Anomaly Detection based on System Logs
- R072-LogContrast: A Weakly Supervised Anomaly Detection Method Leveraging Contrastive Learning

Monday, October 23, 2023 (15:50 – 17:30)

III-A: Software Testing III (5 papers)

- R137-StructureTester: Automatic Machine Translation Testing Based on Variation Feature Vector
- R082-BDGS: A Symbolic Execution Technique for High MC/DC
- R052-Optimal Second-Order Mutants Reduction Based on MOEA/D
- R157-DyFuzz: Skeleton-Based Fuzzing for Python libraries
- HASQ002-Test Generation for Mutation Testing by Symbolic Execution

III-B: Cybersecurity Measures and Threat Mitigation (5 papers)

- R163-RUSPATCH: Towards Timely and Effectively Patching Rust Applications
- R041-A Security Compliance-by-Design Framework Utilizing Reusable Formal Models
- R003-Independent Few-Shot Firmware Integrity Verification with Side-Channel Power Analysis
- R135-Wireless Threats Against V2X Communication
- S017-CGSA-RNN: Abnormal Network Traffic Detection Model Based on CycleGAN and Self-Attention Mechanism

III-C: Software Defect Detection (5 papers)

- R167-CHEMFUZZ: Large Language Models-assisted Fuzzing for Quantum Chemistry Software Bug Detection
- R022-METCN: A Multi-task Enhanced TCN Model for Software Fault Detection and Correction Prediction
- FPDRE002-Development of a Web System for Detecting Bugs in Probabilistic Programs
- R042-Software Vulnerability Detection via Doc2vec with path representation
- FLRAS001-Software Vulnerability Detection Based on Binary Intermediate Slicing

III-D: Software Performance and Fault Injection (4 papers)

- R049-On Error Representativeness of Function Call Interfaces for C/C++ Program
- R092-Adaptive Tracing and Fault Injection based Fault Diagnosis for Open Source Server Software
- S037-SmartPerf: Automated Speed Performance Test from Visual Perspective
- R050-Performance Prediction for Lock-based Programs
QRS 2023 Presentation Schedule: Day 2
All the sessions are based on the time in Chiang Mai, Thailand (UTC+7)

Tuesday, October 24, 2023 (08:30 – 10:10)

IV-A: Software Testing IV (4 papers)
- R076-An Industrial Study on the Challenges and Effects of Diversity-Based Testing in Continuous Integration
- R154-Mobile Test Script Generation from Natural Language Descriptions
- R145-Scope-based Compiler Differential Testing
- IN002-DeepHC: Efficient Generating Tests with High Coverage for Deep Neural Networks

IV-B: AI for Software Development, Testing, and Verification (6 papers)
- R083-Towards an Effective and Interpretable Refinement Approach for DNN Verification
- R081-BTM:Black-Box Testing for DNN based on Meta-Learning
- R112-Mucha: Multi-Channel based Code Change Representation Learning for Commit Message Generation
- R125-DeepIA: An Interpretability Analysis-based Test Data Generation Method for DNN
- R177-A Deep Learning-Based Method for Identifying User Story Semantic Conflicts
- AISS006-A Service-Oriented Framework for an Integrated Study of Intelligent Data Collection and Application

IV-C: Software Quality Assessment (4 papers)
- R171-An Empirical Study of Lightweight JavaScript Engines
- R053-Code Quality Evaluation in IT Communities Based on Sentiment Analysis of User Comments
- R075-Improving Software Modularization Quality Through the Use of Multi-Pattern Modularity Clustering Algorithm
- R160-Just-In-Time Method Name Updating with Heuristics and Neural Model

IV-D: Smart Contracts and Blockchain I (5 papers)
- S019-Smart Contract Test Case Prioritization based on Frequency and Gas Consumption
- R103-Optimizing Gas Consumption in Ethereum Smart Contracts: Best Practices and Techniques
- R111-WASAIUP: A Demand-driven Concolic Fuzzer for EOSIO Smart Contracts
- R104-A Smart Contract Development Framework for Maritime Transportation Systems
- STAIT001-An Approach for Ensuring the Privacy in Smart Contracts

Tuesday, October 24, 2023 (10:40 – 12:20)

V-A: Software Testing V (4 papers)
- R080-Generating Data-Augmented Seed Test Cases for Fuzzing Deep Learning Models
- R040-A Case Study on the "Jungle" Search for Industry-Relevant Regression Testing
- S008-SC-MCC: A Stronger Code Coverage Criterion
- R115-Leveraging Conditional Statement to Generate Acceptance Tests automatically via Traceable Sequence Generation

V-B: Evaluation and Application of Large Language Models (4 papers)
- R192-Git Merge Conflict Resolution Leveraging Strategy Classification and LLM
- S041-Evaluation of Hallucination and Robustness for Large Language Models
- R196-Quality Evaluation of Summarization Models for Patent Documents
V-C: Safety Analysis and Privacy (5 papers)

- R130-Automatic Generation of Component Fault Trees from AADL Models for Design Failure Modes and Effects Analysis
- R209-Generating Autonomous Driving Safety Violation Scenarios Based on Multi-Objective Optimization
- S031-intCV: Automatically Inferring Correlated Variables in Interrupt-Driven Program
- R230-Formal Modeling and Verification of Industrial Robotic Arm - A Case Study
- HASQ001-Privacy Policy Compliance Inspection of Financial Apps

V-D: Smart Contracts and Blockchain II (5 papers)

- R068-Blockchain Network Platform for IoT Data Integrity and Scalability
- R226-Performance Optimization for Information Sharing Process of BlockIoV based on Multi-Objective Particle Swarm
- R124-mpXim: A Decentralized Mixing Scheme based on a Multi-Party Discovering Protocol
- AISS005-An Enhanced Software Architecture to Improve the MQTT Communications Encrypted Model
- R051-A Smart Contract Vulnerability Detection Model Based on Multi-type Features and Pre-training Techniques

Tuesday, October 24, 2023 (13:40 – 15:20)

VI-A: Natural Language Processing I (4 papers)

- R206-ChatGPT vs. Stack Overflow: An Exploratory Comparison of Programming Assistance Tools
- R065-Integrating Extractive and Abstractive Models for Code Comment Generation
- S034-On ChatGPT: Perspectives from Software Engineering Students
- S026-Using Problem Frames Approach for Key Information Extraction from Natural Language Requirements

VI-B: Programming Code Analysis I (4 papers)

- R058-Hierarchical Semantic Graph Construction and Pooling Approach for Cross-language Code Retrieval
- R059-Input Transformation for Pre-Trained-Model-Based Cross-Language Code Search
- R008-Enhancing Code Prediction Transformer with AST Structural Matrix
- R056-Abstract Syntax Tree for Method Name Prediction: How Far Are We?

VI-C: Predictive Modeling and Evaluation (5 papers)

- R013-Modeling of GPGPU architectures for performance analysis of CUDA programs
- S039-Improved Mechanism and Emotional Expression System of A Panda-type Emotional Robot
- R027-Knowledge GraphCompleting with Dual Confrontation Learning Model based on Variational Information Bottleneck Method
- R172-Evaluating the Availability of Service Function Chain under Different Elasticity Strategies based on Colored Petri Net

VI-D: Cyber Forensics, Security, and E-Discovery I (4 papers)

- CFSE001-Reconsideration of Risk Communication and Risk Assessment Support Methods for Security
- CFSE002-Detecting Vulnerable OAuth 2.0 Implementations in Android Applications
- CFSE003-Enhancing Account Recovery with Location-based Dynamic Questions
- CFSE004-On Collecting Onion Server Fingerprints and Identification of Their Operators

Tuesday, October 24, 2023 (15:50 – 17:30)

VII-A: Natural Language Processing II (5 papers)

- S032-IoT Phishing Detection Hybrid NLP/ML-based Model Enhanced with Contextual Embedding
- AISS004-Legal Events Classification in Online Social Community Posts
- R078-LLM for Test Script Generation and Migration: Challenges, Capabilities, and Opportunities
- STAIT005-Bias Analysis in Language Models using An Association Test and Prompt Engineering
- R091-Enhancing Code Completion with Implicit Feedback

VII-B: Programming Code Analysis II (4 papers)

- R173-Commit Classification via Diff-Code GCN based on System Dependency Graph
- S021-Research, Implementation and Analysis of Source Code Metrics in Rust-Code-Analysis
- FPDRE001-Boosting Source Code Learning with Text-Oriented Data Augmentation: An Empirical Study

VII-C: Mobile App and Software Aging Analysis (5 papers)

- R102-AndrAS: Automated Attack Surface Extraction for Android Applications
- R077-Towards the Adoption and Adaptation of the AndroidX Library: An Empirical Study
- R183-An Empirical Study to Identify Software Aging Indicators for Android OS
- R180-Human-Machine Collaborative Testing for Android Applications
- R090-SAVERY: A Framework for the Assessment and Comparison of Mobile Development Tools

VII-D: Cyber Forensics, Security, and E-Discovery II (4 papers)

- CFSE005-The study on the blocking time reduction of the IDS/SDN cooperative firewall system
- CFSE006-Explainable Multimodal Fake Posts Detection Using Feature Extraction with Attention Mechanisms
- CFSE008-DNS Rebinding Attacks Against Browsers on Azure Virtual Machines
- CFSE007-An Agent-Based Modeling Approach to Designing and Optimizing Bug Bounty Programs for Cybersecurity in Developing countries
QRS 2023 Presentation Schedule: Day 3
All the sessions are based on the time in Chiang Mai, Thailand (UTC+7)

Wednesday, October 25, 2023 (08:30 – 10:10)

VIII-A: Automated and Intelligent Software Testing (5 papers)
- AIST003-Test Case Reuse Method Based on Deep Semantic Matching
- AIST004-Reducing Label Errors for Actionable Warning Identification
- AIST009-Test Case Priority Ranking Method Based on Greedy Algorithm
- AIST010-An Input Space Modeling Method for Software Testing Considering Timing
- AIST013-Enhancement of Robustness for Graph Neural Networks in AI Systems

VIII-B: Empirical Software Engineering and Art Smart Contract I (4 papers)
- ESE&ASC006-Intelligent Question Answering System Based on Cognitive Graph: A Case Study of Textile Fabrics
- ESE&ASC007-Research on the construction of a multimodal cognitive Graph of textile and clothing
- ESE&ASC008-Landscape Mapping and Cartography: A Methodology for Evidence-Based Interpretation of Image Scenario Spaces
- ESE&ASC009-A Multi-temporal Data Processing Method for Digital Heritage Restoration: The Case of Ancient Gaochang City

VIII-C: Peer-to-Peer and Cloudlet Technologies (5 papers)
- R159-SPIRT: A Fault-Tolerant and Reliable Peer-to-Peer Serverless ML Training Architecture
- S027-SRRA: A Novel Skewness Based Algorithm for Cloudlet Scheduling
- S040-Solar Energy-Based Virtual Machine Placement Algorithm for Geo-Distributed Datacenters
- R300-Optimizing Media Streaming in Edge-Cloud Systems: Leveraging Geography and User Behavior
- R062-Dependency Aware and Delay Guaranteed SFC Placement in Multi-Domain Networks

VIII-D: Safety and Security in Cyber-Physical Systems (5 papers)
- SSCPS003-Research on Improved Algorithm of UAV Swarm Target Search Strategy Based on Freshness and Target Density
- SSCPS001-Modelling and Verification of Cooperative Vehicle Infrastructure System at Intersections Based on Timed Automata
- SSCPS004-Security Verification Technology of CPS Based on Theorem Proving
- SSCPS006-Modeling and Discovering Data Race with Concurrent Code Property Graphs
- SEBD001-Research on FCS Design Technology of Electric Tilting Quadrotor UAV

Wednesday, October 25, 2023 (10:40 – 12:20)

IX-A: Creative Computing (4 papers)
- STCC003-Fitting and Peak Searching of Spectrum for Fourier Transform Infrared Spectrometer
- STCC005-Enhancing Grid-Connected PV System Performance: Loss Analysis and Efficiency Improvement Strategies
- STCC006-Computational Approach To Color Energy Delivery For Color Blindness
- STCC007-A Creative Computing Approach to Analysis Speaker Intention Using the DIKCW Model

IX-B: Empirical Software Engineering and Art Smart Contract II (4 papers)
- ESE&ASC002-Outfit Compatibility Model with Multi-modal Semantic Interaction Learning
- ESE&ASC003-Research on Active Detection Methods for Video Anomaly Events Based on Concept Semantics
- ESE&ASC004-A Novel Framework for High-category Coverage Clothing Recommendation System Based on Sentiment Analysis
- ESE&ASC005-Cognitive Graph Empowered Textile and Clothing Intelligent Service Platform
IX-C: Workflow Analysis and AI Controllers (4 papers)

- R215-Improving the Detection of Concurrent Artifact Anomalies in a Structure Workflow
- R024-An Approach to Build and Verify Stable Neural Network Controllers for Cyber Physical Systems with Non-Linear Dynamics
- R152-ECIA: Elaborate Change Impact Analysis based on Sub-Statement Level Dependency Graph
- R017-MicroKGCL: A Knowledge Graph for Root Cause Localization of Feedback Issues in Microservices

IX-D: Fast abstract I (7 papers)

- FA006-Uncertainty-Wise Model Evolution with Genetic Programming
- R184-Assume(), Capture(), Verify(), Establish(): A Vocabulary for Static Program Analysis
- R190-Genetic Algorithm Based EFSM Regression Test Sequence Generation
- R221-OpenMP Program Verification Based on Bounded Model Checking
- R165-Effectiveness Evaluation of UAVs Search in Urban Environments
- S038-Research on Object Categorization and Grabbing for a Cleaning Robot

Wednesday, October 25, 2023 (13:40 – 15:20)


- DTES001-Identifying Influential Nodes in Complex System from Multiscale Complex Network Perspective
- DTES002-Research on Micro Vibration Control of Satellite Flexible Structure Using Piezoelectric Variable Stiffness Actuator
- DTES003-Dynamic Comprehensive Risk Assessment of Coal Mill Based on CNN-LSTM and Analytic Hierarchy Process
- DTES004-Voltage Prediction and Fault Detection by using Model Fusion Strategy for Lithium-ion Batteries
- DTES005-Fault localization of Software: A literature Review

X-B: Data Driven Base Decision Making for Software Engineering (4 papers)

- DDBDM001-Multi-Population Genetic Algorithm Based EFSM Regression Test Data Generation
- DDBDM005-A Blockchain-based Requirement Management Framework for Distributed Software Development Environment
- DDBDM007-A survey on exploration of AI ethics in healthcare

X-C: Machine Learning for Verification (4 papers)

- R178-Input Validation for Neural Networks via Local Robustness Verification
- PM001-Modeling Stochastic Deterioration by Chloride Ion Erosion through Sparse Identification of Nonlinear Dynamics

X-D: Fast abstract II (7 papers)

- FA013-An Ontology-based Framework for Medical IoT Forensic Evidence
- FA008-BayesFLO: Bayesian Fault Localization for Software Testing
- FA010-WASMDYPA: Effectively Detecting WebAssembly Bugs via Dynamic Program Analysis
- FA011-CSP based Formal Modeling and Verification of Behavior Trees
- FA012-RustCheck: Safety Enhancement of Unsafe Rust via Dynamic Program Analysis
- FA014-Natural Language Coding (NLC) for Autonomous Stock Trading: A New Dimension in No-Code/Low-Code (NCLC) AI
- FA015-Love the Way You Lie: Unmasking the Deceptions of LLMs