

# The 10th IFIP WG5.15 Conference on Information Technology in Disaster Risk Reduction (ITDRR2025)

14-16 October, 2025







#### **Timetable**

JST	Tuesday 14 October 2025
9:00~10:00	Registration
10:00~10:30	Opening Remark
10:30~11:30	Session 1: Information for Disaster Management
11:30~13:00	Lunch Break
13:00~14:00	Keynote 1
14:00~15:00	Session 1(continued): Information for Disaster Management
15:00~15:30	Coffee Break
15:30~17:30	Session 2: Community Resilience and Local Government
17:45~19:15	Welcome Reception
	Wednesday 15 October 2025
9:00~9:30	Morning Welcome
9:30~10:30	Keynote 2
10:30~11:00	Coffee Break
11:00~12:30	Session 3: Social Network and Trust
12:30~14:00	Lunch Break
14:00~15:00	Late-breaking Poster Presentations
15:00~15:30	Coffee Break
15:30~17:30	Session 4: Preparedness and Risk
19:00~	Banquet
	Thursday 16 October 2025
9:00~9:30	Morning Welcome
9:30~10:30	Keynote 3
10:30~11:30	Session 5: Evacuation1
11:30~13:00	Lunch Break
13:00~14:30	Session 6: Evacuation2
14:30~15:00	Awards Ceremony and Closing Remark
15:15~	Excursion + dinner

#### **Keynote Speeches**

#### 10:30~11:30 (JST), 3:30~4:30 (CET), Tuesday 14 October 2025



**Keynote 1:** 

"A Transdisplinary Approach of Risk and Crisis Communication: Community Resilience in the Face of Climate Change"

#### Caroline Rizza,

Associate Professor, I3-Telecom Paris, France

#### 9:30~10:30 (JST), 2:30~3:30 (CET), Wednesday 15 October 2025



**Keynote 2:** 

"The truth relieved by disasters beyond knowledge - Information connect phenomena -"

#### Shigeru Kakumoto,

Researcher, DiMSIS Institute, Japan

#### 9:30~10:30 (JST), 2:30~3:30 (CET), Thursday 16 October 2025



**Keynote 3:** 

"Innovations in Handling Epidemic Data and Their Impact on Emergency Response"

#### Hiroshi Nishiura,

Professor, Kyoto University, Japan

#### **Tuesday 14 October 2025**

10:00~10:30 (JST)

**Opening Remarks** 

10:30~11:30 (JST)

**Session 1: Information for Disaster Management** 

Chair: Prof Jaziar Radianti (University of Agder)

1-1 "Design Requirements for Information Systems Supporting Health, Medical and Welfare Coordination During Disasters: Insights from Multi-layered Analysis"

Shoko Miyagawa and Yoko Hamadate

1-2 "A Study on Aerial Image-Based Road Damage Estimation System in Wide-Area Disasters"

Kyohei Fukumoto, Koki Asami, Shono Fujita, Kei Hiroi and Michinori Hatayama

13:00~14:00 (JST)

**Keynote 1:** Caroline Rizza

Chair: *Dr. Yuko Murayama* (Tsuda University)

14:00~15:00 (JST)

Session 1(continued): Information for Disaster Management

Chair: Prof Jaziar Radianti (University of Agder)

1-3 "A Support System for Disaster Preparedness Workshops with Hazard Information Viewing and 3D Urban Model-based Reflection Walkthroughs"

Keisuke Utsu, Mami Aida and Osamu Uchida

## 1-4 "Estimating Personal Natural Disaster Risk Using Smartphone Location Data-Comparative Analysis of Two Cities in Japan-"

Mizuki Miura, Akihiro Kobayashi and Daisuke Kamisaka

#### 15:30~17:30 (JST)

#### **Session 2: Community Resilience and Local Government**

Chair: *Assc. Prof. Terje Gjøsæter* (University of Agder)

# 2-1 "Developing Interdependent Digitalized Co-production of Emergency Response: Requirements and Challenges"

Sofie Pilemalm, Mohamud Yusuf Mohamed and Emma Finnevidsson

# 2-2 "Resilience of local community in the tourist area of Labuan Bajo, Indonesia: A perspective from risk and crisis communication" Osmar Shalih, Putri Wibawanti and Caroline Rizza

### 2-3 "Information Platform Supporting Mutual-Assisted Evacuation at Urban Disasters"

Tomohiro Kokogawa, Taiki Yuasa and Keihiro Ochiai

2-4 "Integrated Natural Disaster Notification System and Logistics/Resource Management Solution for Disaster Risk Reduction Agencies in the Philippines"

Brad Reddersen, Ria Alaba and Tim Loncarich

#### Wednesday 15 October 2025

9:30~10:30 (JST)

**Keynote 2:** Shigeru Kakumoto

Chair: Prof. Michinori Hatayama (DPRI, Kyoto University)

11:00~12:30 (JST)

**Session 3: Social Network and Trust** 

Chair: *Prof. Osamu Uchida* (Tokai University)

3-1 "Machine Learning Model to Predict Opinion Polarization in Indonesian Social Network on Ivermectin as Covid-19 Cure"

Jaziar Radianti, Asep Sholahuddin and Irlandia Ginandjar

**3-2** "The Importance of Trust in Reducing Disaster Risk: Evidence from Norway"

Christian Webersik and Emily Klassen

3-3 "Social Network Analysis of Civilian Support Networks for the Ukrainian Military"

Myroslava Kushnir and Anna Nagurney

14:00~15:00 (JST)

Poster Session (G\*\*: General, S\*\*, Student)

Chair: Assc. Prof. Keisuke Utsu (Tokai University)

G02: "Virtual Reality for Decontamination Training"

Anissa Lye and David Teng

G03: "Machine Learning Solutions in Identifying Potential Human Trafficking Recruitment During Humanitarian Disasters: Case Study of Ukraine"

Renata Konrad

G04: "Data flow Diagram, which generated from "the warning system in flood disasters, case study from Chiang Mai, Thailand 2024" Siripen Iamurai and Pathawit Chongsermsirisakul

G05: "Using Industry Sector Entropy to Predict Economic Community Disaster Resilience: Real-world Verification from the COVID-19 Pandemic"

Thomas Brindle

G06: "A study on the effects of ""Nigechizu"" workshop - A case study of a disaster prevention learning program in Utsunomiya City, Tochigi, JAPAN -"

Masako Inoue

G07: "Phase Transition of Information Support Needs in Disaster Response: Insights from a Decade of IT DART Operations in Japan" Dai Sato

G08: "Mapping Challenges of Inter-Agency Communication and Coordination in Disaster Response: A Multi-Stakeholder Study from Türkiye"

Pinar Umul Unsal

G09: ""Simulating a Crisis: How Virtual Experience Shapes Decision-Making in Disaster Preparedness"

Pinar Umul Unsal

S01: "Modeling the Decay of Social Interest in Earthquake Disasters: A Two Phase Time Series Analysis of Newspaper Coverage" Kaito Fujie

S02: "A Study on a Disaster Analysis Platform Using SNS Comment Analysis and Secondary Data Generation"

Masami Shinoda

S03: "Human-Centered Narratives from Evacuation Simulations: Automatic Generation Using LLMs and Multimodal RAG"
Yuto Hirahata

S04: "Bridging Cost and Safety: A STAMP/STPA Approach to Quadruped Robots Deployment in SAR Operations and Bousai-DX Integration"

Princelove Herbert

**S05:** "Early Warning of Frailty in Evacuation Shelters Using Gait Speed Detection by IMU"

Haruto Nakai

S06: "Consideration of Practical Utilization of Spacetime Geographic Information Systems for Local Governments: A Disaster Scale-Based Approach"

Koki Kaneko

S07: "Analysis of evacuation route model based on residents' risk preferences under inundation conditions"

Chisa Baba

**S08: "Concept and Development of Disaster Prevention Fashion"** Naoko Tosa, Natalie Ng Jen Ryu, Yusuke Takikawa and Ryohei Nakatsu

15:30~17:30 (JST)

Session 4: Preparedness and Risk

Chair: Dr. Reet Kasepalu (The Estonian Academy of Security Sciences)

### 4-1 "AI in Action: Evaluating Chatbot-Supported Reflection for Incident Commander Training"

Daniel Jefimov, Reet Kasepalu, Gerti Pishtari and Edna Milena Sarmiento-Márquez

## 4-2 "A systematic review of GeoAI for Disaster Risk Reduction: Synergies, Challenges, and Future Directions"

Hanqi Li, Kei Hiroi and Michinori Hatayama

### 4-3 "Enhancing Shared Situational Awareness Through Information Trading Zones in Emergency Management"

Kjetil Rustenberg and Kristine Steen-Tveit

### 4-4 "Inference of a Weighting Scheme for Cybersecurity Game Simulations"

Jennifer-Marieclaire Sturlese and Edgar Weippl

#### **Thursday 16 October 2025**

9:30~10:30 (JST)

Keynote 3: Hiroshi Nishiura

Chair: *Prof. Michinori Hatayama* (DPRI, Kyoto University)

10:30~11:30 (JST))

**Session 5: Evacuation 1** 

Chair: *Prof. Sofie Pilemalm* (Linköping University)

5-1 "A Method for Deriving Evacuation Routes Considering Road Blockages during Earthquakes with Physarum Solver"

Rei Fujiwara and Kayoko Yamamoto

5-2 "A Framework of Emerging Technology-Enabled Evacuation System for Active Shooter Disaster in the Built Environment" Jong Han Yoon

13:00~14:30 (JST)

**Session 6: Evacuation2** 

Chair: *Prof. Jun Sasaki* (Yamato University)

6-1 "Proposal for the Information Infrastructure Construction and Operation Support System in Evacuation Shelters During Disasters"

Kohichi Ogawa, Nobukuni Hamamoto, Dai Sato, Hiroki Kashiwazaki, Motoyuki Ohmori and Takeshi Ikenaga

6-2 "Search Method for Evacuation Routes during Tsunamis Using Cuckoo Search"

Takeya Okimura and Kayoko Yamamoto

#### 6-3 "Augmented Reality based Spatially Guided Navigation to Emergency Collection Points for Flood Evacuation: A Pilot Study in Mumbai, India"

Sanjay Saifi and Raaj Ramsankaran

14:30~15:00 (JST)

**Awards Ceremony and Closing Remarks** 

Chair: Assc. Prof. Kei Hiroi (DPRI, Kyoto University)