## Session 5F. Built Environment and Infrastructure Monitoring, Assessment, and Maintenance 4 Moderator: Sharareh Kermanshachi (University of Texas, Arlington)

15:15 #247. Vision-Model-based Real-time localization of unmanned aerial vehicle for autonomous structure inspection under GPS-denied environment

**Zhexiong Shang and Zhigang Shen** 

**15:30** #351. Optimizing the socioeconomic benefit of post-disaster strategy by prioritizing reconstruction of damaged facilities

Pedram Ghannad, Yong-Cheol Lee, Carol Friedland and Eunhwa Yang

15:45 #342. Identification, Categorization, and Weighting of Barriers to Timely Post-Disaster Recovery Process

Behzad Rouhanizadeh, Sharareh Kermanshachi and Thahomina Jahan Nipa

16:00 #223. Information Requirements for Virtual Environments to Study Human-Building Interactions during Active Shooter Incidents

Runhe Zhu, Burcin Becerik-Gerber, Gale Lucas, Erroll Southers and David V. Pynadath

16:15 #392. Precision Comparison of CNNs for Detection of Concrete Deterioration Types from Digital Images

Satoshi Anai, Nobuyoshi Yabuki and Tomohiro Fukuda

16:30 #236. Planning and Monitoring of Building Energy Demands under Uncertainties by Using IoT Data

Soowon Chang, Daniel Castro-Lacouture, Kanae Matsui and Yoshiki Yamagata

- 16:45 #164. Bridge Damage Prediction Using Deep Neural Networks

  Soram Lim and Seokho Chi
- 17:00 #290. Impact of Ground Subsidence on Groundwater Quality: A Case Study in Los Angeles, California

Mohammad Khorrami, Mohsen Hatami, Babak Alizadeh, Hedieh Khorrami, Peyman Rahgozar and Ian Flood