# Invited talk

**CHALLENGES IN DISTRIBUTED REAL-TIME SYSTEMS: SCHEDULING AND SYNCHRONIZATION**

*Prof. Binoy Ravindran, Virginia Institute of Technology*

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## Accepted papers

- **A DYNAMIC SERVICE LOOKUP AND DISCOVERY SCHEME USING A SELF-ORGANIZING OVERLAY NETWORK FOR INDOOR LOCATION-BASED SERVICE**  
  Seol Young Jeong, Hyeong Gon Jo and Soon Ju Kang

- **A PRACTICAL SOLUTION FOR FUNCTIONAL RECONFIGURATION OF REAL-TIME SERVICE BASED APPLICATIONS THROUGH PARTIAL SCHEDULABILITY**  
  Marisol García-Valls and Pablo Basanta-Val

- **A SCHEDULABILITY ANALYSIS FRAMEWORK FOR REAL-TIME INFRASTRUCTURE SYSTEMS MANAGING HETEROGENEOUS RESOURCES**  
  Jinhyun Kim and Sungwon Kang

- **ARCHITECTURE OF A CYBERPHYSICAL AVATAR**  
  Song Han, Aloysius K. Mok, Jianyong Meng, Yi-Hung Wei, Pei-Chi Huang, Xiuming Zhu, Luis Sentis, Kwan Suk Kim, Risto Miikkulainen and Jacob Menashe

- **AUTOMATED PLACEMENT OF VIRTUAL MACHINE REPLICAS TO SUPPORT RELIABLE DISTRIBUTED REAL-TIME AND EMBEDDED SYSTEMS IN THE CLOUD**  
  Kyoungho An, Faruk Caglar, Shashank Shekhar and Aniruddha Gokhale

- **REAL-TIME MODELLING OF DDS FOR EVENT-DRIVEN APPLICATIONS**  
  Hector Perez Tijero and J. Javier Gutierrez Garcia

- **SUPPORTING EARLY MODELING AND END-TO-END TIMING ANALYSIS OF VEHICULAR DISTRIBUTED REAL-TIME APPLICATIONS**  
  Saad Mubeen, Jukka Mäki-Turja and Mikael Sjödin

- **TOWARD GPU-ACCELERATED TRAFFIC SIMULATION AND ITS REAL-TIME CHALLENGE**  
  Manato Hirabayashi, Shinpei Kato, Masato Edahiro and Yuki Sugiyama

- **TOWARDS A GENERIC, SERVICE-ORIENTED FRAMEWORK FOR DISTRIBUTED REAL-TIME SYSTEMS**  
  Muhammad Umer Tariq, Mohammad Abdullah Al Faruque, Santiago Grijalva and Marilyn Wolf

- **TOWARDS A RECONFIGURATION SERVICE FOR DISTRIBUTED REAL-TIME JAVA**  
  Pablo Basanta-Val and Marisol García-Valls