SS17: Intelligent Robotics and Application for Healthcare

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- A short description of the session.

  The session focuses on intelligent robotics and application in field of healthcare. Recently, various types of robots and ICT applications have been developed to realize elderly care, daily life assistance, health promotion and rehabilitation support. Such systems are defined as intelligent and human friendly system applied in environments coexisting with human. Computational intelligence including neural computing, fuzzy computing, and evolutionary computing can be applied to the assistance and service to people in the intelligent systems. In this session, we will discuss the state-of-the-art of methodology for the intelligent systems in terms of various applications for healthcare.

- Topics of interest include, but not limited to:

  Heath Care System

  Health Support System

  Healthcare Informatics

  Wellness support system

  Computational Intelligence in Health Care

  Human-Computer Interaction for Health Care

  Medical and Health Data Processing

  Rehabilitation Support System

- List of contribution:

  - "Weather forecast support system implemented into robot partner for supporting elderly people using Fuzzy logic" (ID: 23)
    Julia Szeles, Naoyuki Kubota and Jinseok Woo
  - "Fuzzy Echo State Network for Heartbeat Detection using Ultrasensitive Vibration Sensor" (ID: 100)
    Takenori Obo, Toshiyuki Sawayama, Takuya Sawayama and Naoyuki Kubota
  - "Fuzzy Wall-Following Control of A Wheelchair" (ID: 103)
    Ya-Ting Lee, Chian-Song Chiu and I-Tung Kuo
  - "Optimizing FELM Ensembles using GA-BIC" (ID: 205)
    Wei Shiung Liew, Chu-Kiong Loo and Takenori Obo