

2019~2020学年第1学期第3周学术活动安排(4)

序号	主办单位	时间	地点	报告题目	报告人	报告人职称	报告人单位	联络人
沁湖讲堂之学术(信息)第175讲	冶金自动化与检测技术教育部工程研究中心、信息科学与工程学院	2019年9月20日(周五)下午16:00	青山校区教十楼四楼学术报告厅	From Modeling to Implementation of Cognitive and Wearable Computing Systems based on Body Sensor Networks: the SPINE project	Prof. Giancarlo Fortino	教授	University of Calabria, Italy	吴老师 68862349

校科协

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报告人简介

Wearable computing is a relatively new area of research and development that aims at supporting people in different application domains: health-care (monitoring assisted livings), fitness (monitoring athletes), social interactions (enabling multi-user activity recognition, e.g. handshake), videogames (enabling joystick-less interactions), factory (monitoring employees in their activity), etc. Wearable computing is based on wearable computing devices such as sensor nodes (e.g. to measure heart rate, temperature, blood oxygen, etc), common life objects (e.g. watch, belt, etc), smartphones/PDA. Wearable computing has been recently boosted by the introduction of body sensor networks (BSNs), i.e. networks of wireless wearable sensor nodes coordinated by more capable coordinators (smartphones, tablets, PCs). Although the basic elements (sensors, protocols, coordinators) of a BSN are available (already from a commercial point of view), developing BSN systems/applications is a complex task that requires design methods based on effective and efficient programming frameworks. In this keynote, we will introduce programming approaches and methods to effectively develop (model, implement and deploy) efficient BSN systems/applications. From the practical viewpoint, the keynote will be based on the SPINE project (<http://spine.deis.unical.it>), currently led by Prof. Fortino's research group. Finally, the keynote will present some really prototyped SPINE-based cognitive and wearable computing systems (e.g. activity recognition systems, fall detection systems, mobile ECG processing systems, elbow/knee rehabilitation systems, etc.)