

## CIAM – Data management and IT Knowledge-based Community...meeting place for professional and per-

CIAM invites leaders and employees in our partner organisations to a lecture on  
Thursday, 11th August 2011, 13.00-14.00, KE E-429 IDE-Hallen

### 'Thumb-in-Cloud: A platform Bridging Low-End Mobile Phones and Cloud Computing Services'

*Mobile cloud computing has brought many new applications to mobile phones. However, many mobile phones worldwide are low-end phones. In order for them to use mobile computing services, their system and energy gaps must be overcome. Their system gap is their inadequate computational capability, lack of phone storage, and unstable and slow communication links. Their energy gap is their limited battery power lifecycle, since extra computation and networking activities consume battery power rapidly. In this paper, we present a novel operational system, Thumb-in-Cloud, to bridge these gaps. Thumb-in-Cloud has two core components: Thumb Machine and Thumb Socket. With these components, low-end phones can be programmed, new applications can be installed on them, and their codes are portable across low-end platforms.*

*Thumb-in-Cloud can extend these phones' computational capability and save energy by offloading computational tasks to the cloud. It can optimize phone communication for the unstable and constrained GPRS data link and save up to 47% of energy consumption by exploiting the GSM modem's networking characteristics.*

**SPEAKER:** Professor Weijia Jia, City University of Hong Kong

**DATE AND TIME:** Thursday 11th August 2011, 13:00-14:00

**VENUE:** University of Stavanger, KE E-429 IDE-Hallen

**DEADLINE FOR REGISTRATION:** Wednesday , 10th. August kl 12:00 to [ciam@uis.no](mailto:ciam@uis.no)

