

THE BEDFORD BRANCH OF THE  
BRITISH COMPUTER SOCIETY  
(BCS) / UNIVERSITY OF BUCKING-  
HAM



REGISTER ONLINE AT:  
<https://events.bcs.org/book/1442>



**Tuesday 21 April 2015**  
6.30-8.00pm  
Registration starts at 6.00pm



**Venue: Chandos Road Building**  
**University of Buckingham, Buckingham,**  
**MK18 1EG**



**"Cooperative indoors localisation between Smartphones based on on-board GNSS receivers, wireless communication transceivers and inertial sensors"**

**GUEST SPEAKER** Dr Ihsan Lami, Senior Research Officer and Professor in Applied Computing at The School of Science, University of Buckingham

# COOPERATIVE INDOORS LOCALISATION BETWEEN SMARTPHONES BASED ON ON-BOARD GNSS RECEIVERS, WIRELESS COMMUNICATION TRANSVERS AND INERTIAL SENSORS

We are delighted to welcome Dr Ihsan Lami, Senior Research Officer and Professor in Applied Computing at the School of Science, University of Buckingham, to talk at an event organised by the Bedford branch of the British Computer Society (BCS) and the University of Buckingham on Tuesday, 21 April, 2015. This talk will be held at the University of Buckingham's Chandos Road Building, Buckingham, and you are warmly invited to attend. The talk will start at 6.30pm - with registration and refreshments from 6.00pm.

Smartphones and Tablets (SPs), driven by mobile-services/applications are becoming very important to our communication, localization and information needs. Demands are huge for seamless outdoors to indoors navigation - especially for accurate indoors localization. Examples of such Location Based Services (LBS) include tracking users for security and safety, find nearest restaurant/shop and other Point-Of-Interest information.

Most of the current solutions do attempt to hybridize multi-GNSS signals (GPS plus GLONASS) with on board SPs wireless communication technologies (cellular 2G/3G/4G, WiFi, Bluetooth) as well as other inertial sensors to offer accurate/seamless location.

This talk will explore the offering of various solutions based on hybridisation of the GNSS receivers with the Wireless technologies on SPs, and then suggest that the way forward is to use cooperative on-the-go structure-less solutions. The talk will conclude by discussing a proposed/developed Smart Indoors Localization Scheme (SILS) whereby participating Smartphones (SPs) in the same outdoors-plus-indoors vicinity will form a Bluetooth network to help locate the indoors SPs.

Guest speaker:  
Dr Ihsan Lami



## AGENDA:

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|--------|--|
| 6.00pm | Registration, refreshments and networking  |
| 6.30pm | Welcome and introduction   |
|        | Cooperative indoors localisation between Smartphones based on on-board GNSS receivers, wireless communication transvers and inertial sensors |
| 7.20pm | Opportunity to question the speaker  |
| 7.45pm | Thanks   |
|        | Opportunity to network and talk to the speaker   |

For further information visit the Bedford BCS branch website at <http://www.beds.bcs.org.uk/event.php?event=105>

For more details and to register your attendance:

 <https://events.bcs.org/book/1442>

Parking is available to the south of the Chandos Road Building (CRB), MK18 1EG and on the 'island' car park nearby.