

BSN Platform Tutorial

11 April 2005

Imperial College London, UK

In conjunction with
International Workshop on Wearable and Implantable
Body Sensor Networks
12th – 13th April, 2005, Imperial College London, UK

Session 1: Introduction to Body Sensor Networks

Introduce the current state-of-the-art in wireless sensor networks and its significance and future applications to sensing and monitoring devices for healthcare.

Session 2: BSN hardware architecture and sensor board design

Introduce the basic architecture and extensibility of BSN Node for different sensing environments both for healthcare applications and general wireless sensor networks.

Session 3: Introduction to Tiny OS

Introduce the major concepts required to program Tiny OS applications. These include a description of components, interfaces, commands, events, and Tiny OS programming model.

Lunch

Session 4: BSN programming

Hands on session on sensor data acquisition with the BSN node. This session will illustrate how to build, debug, and run Tiny OS applications on the BSN node.

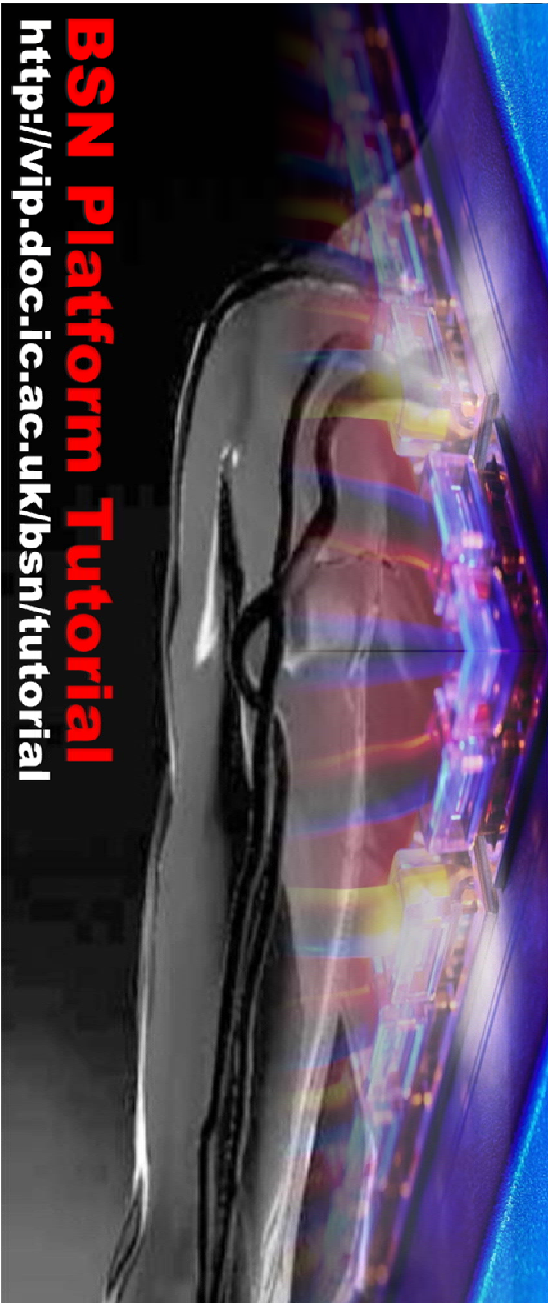
Session 5: BSN sensor board design

Hands on session on how to use BSN sensor board for building wireless sensing applications.

Session 6: Wireless data path and sensor message hopping

Introduces the concept and theory of packet broadcasting, how to form wireless sensor network, and issues related to message hopping. It will also illustrate a simple multi-hop data propagation method that allows data to be collected by a central location.

Dinner



Tutorial Registration Fees:

Registration (Early): £300
(Before March 11th 2005)

Registration (Late): £400

Each fully registered attendee will receive a BSN development kit, which consists of a programming board, a sensor board, and a pair of BSN nodes. Details about the BSN node can be found at:

http://www.doc.ic.ac.uk/vip/ubimon/bsn_node