Ben Zhang

Resume

January 2012

Address: Room 117B, Zijing 1st Bldg
Tsinghua University, Beijing, China.
Phone: +86 151 2000 3948
Email: nebgnahz@gmail.com
WWW: benzhang.name

Education

Tsinghua University, Beijing, China   *Aug 2008 - Jul 2012*
   Bachelor of Engineering in Electronic Engineering
Chinese University of Hong Kong, Hong Kong, China   *Sept 2010 - Jan 2011*
   Exchange Student in Electronic Engineering Department, GPA 3.95/4.0

Academic Experience

Mobile and Sensing Systems, Microsoft Research Asia, Beijing, China   *Jun 2011 - present*
Research Intern, advised by Dr. Xiaofan Fred Jiang

LiveSynergy
- Embedded hardware system design and debugging; improved the system reliability and MCU transient immunity; manufactured 60+ boards for deployment.
- Design and development of Windows Phone 7.5 native application to enable bi-directional interaction
- Conducted experiments to measure the reliability and consistency for zone proximity sensing of current technologies (BLE, RFID, ZigBee); post-processed the raw data and compared the results with our magnetic-based platform.
- Presented several demos for UbiComp Open House Demo and MSR Technical Review Board.

PhoneWeb
- Implemented a GUI frontend for PhoneWeb - SubwayRendezVous client

Digital Television Laboratory (DTV), Tsinghua U, Beijing, China   *Jul 2009 - Jun 2011*
Research Assistant, advised by Prof. Kewu Peng
- Proposed a simplified criterion – Hamming Euclidean Distance Spectra – to evaluate the equivalence of labelings and obtain the classification of unique mappings; submitted a patent to suggest a constellation mapping and de-mapping scheme by applying this criterion on DVB-S2 coded modulation systems.

Publications & Patents

1. Xiaofan Jiang, Chieh-Jan Mike Liang, Kaifei Chen, **Ben Zhang**, Jeff Hsu, Bin Cao, Jie Liu, and Feng Zhao, "Design and Evaluation of a Wireless Magnetic-based Proximity Detection Platform for Indoor Applications", to appear in the Proceedings of the 11th ACM/IEEE Conference on Information Processing in Sensor Networks (IPSN 2012), Apr. 2012.

2. Xiaofan Jiang, Chieh-Jan Mike Liang, Feng Zhao, Kaifei Chen, Jeff Hsu, **Ben Zhang**, and Jie Liu, "Demo: Creating Interactive Virtual Zones in Physical Space with Magnetic-Induction", the 9th ACM Conference on Embedded Networked Sensor Systems (SenSys 2011), Nov. 2011

3. Kewu Peng, **Ben Zhang**, Junhao Lin, Hui Yang, and Changyong Pan, "A Constellation Mapping and De-mapping Scheme for DVB-S2 Coded Modulation Systems", Chinese Invention Patent, Patent Application Number: 201110216908.2

Personals & Skills

- English: TOEFL(iBT) 109; GRE 610+800+4.0
- Computer skills: Assembly, C, C++, C#, NesC, Verilog, Matlab, Python, HTML, XAML, Pspice, Visual DSP++, Multisim, Quartus, EAGLE PCB design, LaTeX, Adobe DreamWeaver, Sony Vegas