YANG DENG

Employment

Software Engineer, Researcher

Aalto University

September 2011 – October 2016

Adaptive Packet Size Control for 6LoWPAN (2014 - 2016)

- Analyzed fragment issue of data transmission in 6LoWPAN
- Designed a "linear first then exponential" algorithm to improve the throughput by 40% at best
- Published a paper on EWSN (best sensor network conference in Europe, also famous in the world)

Multicast for Constrained Networks (2013 - 2015)

- Implemented simplified MLD on Contiki OS
- Evaluated performance of MPL and flooding in terms of different metrics
- Developed a simple multicast protocol for constrained network based on PIM-SSM

MAMMoTH - Massive Scale Machine to Machine Service (2011 - 2013)

- Implemented an HTTP-CoAP mapping layer on Contiki OS
- Deployed more than 1000 emulated and real constrained devices on the platform

Web Administrator

CSSA-Espoo ry

January 2012 – December 2015

- Maintained a phpBB forum that provides information for all Chinese students in Greater Helsinki
- Created a customized WordPress website for the organization

Software Engineer

Nokia Research Center, China

May 2010 - August 2011

Rich Context Mobile Platform

- Designed and implemented a publish-subscribe messaging mechanism and a QT GUI on N900 device
- Filed a patent application on inter-widget communication

Software Tester, Intern

IBM Corporation, China

June 2009 – September 2009

- Localization and globalization testing for Lotus Software
- Wrote a PERL script to detect empty translations of the content

Software Engineer, Intern

Nokia Corporation, China

Noverber 2007 - December 2008

Handwriting Calculator

- Developed GTK+ GUI (including formula display layout and stylus handy gestures) on Maemo platform
- Won outstanding project award issued by Nokia Research Center

Education

Espoo, Finland

Aalto University

September 2011 – May 2016

• Licentiate candidate in Computer Science and Engineering. GPA: 4.77/5

Thesis: Enhancement of 6LoWPAN Transmission in Lossy and Low Power Networks

Beijing, China

Beijing University of Posts and Communications

September 2003 – April 2010

• M.S.E in Computer Networking. GPA: 4.0/5

Thesis: Research on Architecture of Telecom Mashup Platform. Grade: outstanding

• B.S.E in Computer Science and Engineering. GPA: 4.4/5

Thesis: Client Implementation in Video Monitoring System. Grade: outstanding

Additional Experience

- Web Developer (2016): Built an e-commerce website by WooCommerce for Kanssani
- Teaching Assistant (2015): Taught two assignments (P2P networking and indoor position by WIFI fingerprint)
- Thesis Instructor (2013 2014): Instructed two master students' theses on sensor networking