School: 235 Albany St. #5119C Cambridge, MA 02139

# KATHERINE KUAN

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Home: 3424 Beresford Ave. Belmont, CA 94002 \* U.S. Citizen

**Education** Massachusetts Institute of Technology

Cambridge, MA Candidate for Masters of Engineering, Electrical Engineering and Computer Science June 2010 Bachelor of Science, Electrical Engineering and Computer Science June 2009

Cumulative GPA: 4.6/5.0

Coursework: Algorithms, AI, Computer Systems Engineering, UI Design, Biomedical Computing

**Experience** 

# Moca, Open Source Remote Medical Diagnostics Platform **Software Engineer (MIT Media Lab)**

Cambridge, MA Feb 2009 - Present

- Contributed to development of mobile telemedicine platform (Google Android application and OpenMRS electronic medical record system backend) for rural healthcare workers in resource-poor communities
- Collaborated on team of 20+ engineers, doctors, business people, and faculty
- Worked as Google Summer of Code 2009 Intern for OpenMRS on Flash interface for doctors to review patient data (text, images, audio, video)

## National Telehealth Center, University of Philippines (UP Manila) Fellow (MIT Public Service Center)

Manila, PHILIPPINES June 2009 – July 2009

- Pushed for public policy on telemedicine services within national social health insurance corporation (PhilHealth) through presentations for their President and CEO, COO, SVPs, and Department Heads
- Prepared for Moca deployment through training of local software developers, hardware testing, workflow analysis, and usability testing with doctors, nurses, and midwives
- Delivered telehealth and Moca presentations to Dean of UP College of Medicine, governor of province, SMART telecom company, university CS students, Tarlac State University CS Dept. MIT Alumni Club

## Microsoft Research Asia **Software Engineering Intern (Interaction Design Group)**

Beijing, CHINA June 2008 - Aug 2008

- Designed and developed touchscreen graphical interface to prototype new tangible mobile devices aimed at more efficient access/management of digital data (songs, tasks, documents, photos)
- Learned to use many development tools and technologies rapidly (C#, Visual Studio 2008, Microsoft Silverlight, Server/Client Architecture, XML serialization) to roll out prototype within 11 weeks

## **Cisco Systems** Software Engineering Intern (Digital Media Systems Group)

San Jose, CA June 2007 - Aug 2007

- · Created software tool (Remote Control Navigation SDK) to enable interaction with digital signage
- Responsible for development life cycle of SDK: specification-writing, implementation, testing, code review, patent-writing, user manual documentation, and demo to business unit of 30 people
- Won 1st Prize in Cisco's Intern Poster Competition for presentation of technical work accomplished
- Submitted patent idea to Cisco Patents On-Line: "Directional Navigation in Interactive Flash Apps"

# **UCLA Center for Network Embedded Systems Wireless Propagation Intern (Unwired Laboratory)**

Los Angeles, CA June 2006 - Aug 2006

- Worked with 3 interns on UNIX-based radio testbed system for directional wireless communication
- Developed automatic gain control to maximize signal-to-noise ratio in digitizer and two radios
- Research published at Mobicom 2006: "Directional Radio Propagation for Peer-to-Peer Networks"

#### Skills

- Java, Python, C#, Flash ActionScript, Matlab, Scheme, HTML, CSS (Took intro classes in C++, C)
- Windows XP, Microsoft Office Suite, Microsoft Silverlight, Macromedia Dreamweaver

#### Leadership

## Society of Women Engineers (SWE) Senator for Region F, MIT SWE President, MIT SWE VP

Cambridge, MA Dec 2005 - Present

- Determined future direction of society with National SWE Senate through strategic planning
- Managed 40 MITSWE board members as President to serve 500+ SWE members through 2 events/wk
- Led section to earn 6 prestigious awards in 1 year from MIT Institute, Regional and National SWE
- Redesigned website and was awarded Best Collegiate Website 3rd Place at SWE National Conference

## **Loudoun County Government Board of Supervisors Office Energy Research and Community Organizing Extern**

Leesburg, VA Jan 2009

- Promoted energy efficiency in the community by recommending energy policies/initiatives to the Board
- Worked with 40 business owners, community leaders, gov staff, and citizens to lead development of 4 major documents (i.e. Green Business Awards Program, Top 12 Strategies for Greening Loudoun)

#### **Activities**

Teaching Assistant (TA), Dorm Associate Advisor, Christian Fellowship, Community Youth Council