

Charles Chifan Wang

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EDUCATION

Northwestern University, McCormick School of Engineering and Applied Science, Evanston, Illinois
Master of Science with thesis in Biomedical Engineering June, 2009
GPA: 3.67 / 4.00 Focus: lower limb prostheses and rehabilitation
Advisors: Steven A. Gard, Ph.D., and Andrew H. Hansen, Ph.D., Northwestern Prosthetics Research Lab
Duke University, Pratt School of Engineering, Durham, North Carolina
Bachelor of Science and Engineering in Biomedical Engineering and Electrical Engineering May, 2007
GPA: 3.38 / 4.00 Dean's List: Spring 2005 and Spring 2006
University of New South Wales, Sydney, New South Wales, Australia Fall, 2005
Coursework: Bioelectricity, Biomaterials, Biomechanics, Biological Transport, Medical Instrumentation, Neural Electrostimulation, Prosthetic Limbs, Integrated Circuits, Linear Control, Robotics & Automation, Semiconductors, Microelectromechanical Systems, Physiology

EXPERIENCES

Pratt Undergraduate Research Fellowship, Duke University Jan. 2006 ~ Aug. 2007
Project: Enhancing Neural Electrode Surface with Carbon Nanotubes
Advisor: Jeffrey T. Glass, Ph.D., Duke Electrical and Computer Engineering, jeff.glass@duke.edu

- developed and advanced a research project effectively and autonomously
- measured surface electrochemical properties of neural electrodes and Carbon Nanotubes
- trained to use the Scanning Electron Microscope and to perform PECVD growth

United Nations' Global Youth Leadership Summit, NYC UN Headquarters Oct. 29-31, 2006

- increased my awareness of global problems and sense of individual responsibility as a BME
- summit concentrated on the Millennium Development Goals, such as poverty reduction through job creation, social entrepreneurship, sustainable engineering

Standard Chartered Bank, Taipei, Taiwan May ~ Jul. 2004

- experienced a dynamic workplace environment, improved my interpersonal and teamwork skills
- trained in credit card loans, telemarketing, and street corner direct sales techniques
- translated company surveys, leadership course materials, and online lessons from English to Chinese

ACTIVITIES

Get A Grip! A Middle School Engineering Design Challenge (volunteer teacher) Jan. 2008 ~ present

- improved my ability to motivate, explain new concepts, lead a discussion, encourage participation
- program challenges middle school students to design and construct a prosthetic arm for a fictitious girl
- taught students how to define problem, brainstorm solutions, engage in group work, construct prototype

Engineers Without Borders, Duke (founding member, research team) Jan. 2005 ~ May 2007

- helped to design mechanical aerators installed in Indonesian shrimp hatcheries, ruined by the tsunami of 2004, to improve their stock yield and restore the villages' shrimp industries
- helped to design roof rainwater catchment systems installed in Uganda for a clean, stable water source
- helped to design playground sensory stations for aurally- and visually-impaired children, and a wheelchair-accessible sandbox to promote interaction in play

DukEngineer Magazine (writer) Aug. 2004 ~ May 2007

- produced annually by undergraduate engineers, reporting on new research and student organizations
- 2005 issue: *A New School of Engineers*
 - Promoting a track to prepare engineering students for management and entrepreneurship
- 2007 issue: *Engineers Without Borders: A Year in Review*
 - Reviewing EWB's involvements in Uganda and the local playground during that year

SKILLS

Technical: Assembly Language, C++, Canvas, JMP, LabVIEW, LaTeX, Matlab, Maple, Microchip MPLAB IDE, NEURON, Quartus, SketchUp, Spice, SPSS, Microsoft Office

Language: fluent in Mandarin Chinese (including typing); basic conversational Spanish and Korean