Min-Hua Ivy Chen

1507 Engineering II Building Santa Barbara, CA mhichen@umich.edu

Education

University of Michigan, Rackham Graduate School

Expected May 2015

PhD Candidate in Materials Science

Expected May 2019

Ann Arbor, MI

Columbia University, School of Engineering and Applied Science B.S. in Materials Science and Engineering, Cum Laude New York, NY May 2010

The Lawrenceville School

Lawrenceville, NJ

Cum Laude

May 2006

Professional Experience

University of Michigan, Materials Science and Engineering

Ann Arbor, MI

Graduate Student Research Assistant, Van der Ven Group

Fall 2010-Present

Lead the development of C++ program for phonon calculations and participated in rewriting of cluster expansion software previously developed by group members. Simultaneously researching conversion cathode lithium-ion battery materials using first-principles methods.

University of Michigan, Materials Science and Engineering

Ann Arbor, MI

Graduate Student Instructor

Winter 2013

Guided students in materials laboratory experiments and graded laboratory reports and assignments.

Columbia University, School of Engineering and Applied Science

New York, NY

Undergraduate Research Assistant, Im Group

Summer 2009–Spring 2010

Assisted group members in studying mixed phase solidification induced by crystallization of Si samples with a continuous-wave laser. Characterized samples using atomic force microscopy, scanning electron microscope, and electron backscatter diffraction.

Columbia University, Department of Mathematics

New York, NY

Teaching Assistant

Fall 2009-Spring 2010

Held weekly office hours for Calculus I and II students, in addition to grading weekly assignments.

Columbia University, School of Engineering and Applied Science

New York, NY

Undergraduate Research Assistant, Herman Group

Fall 2007–Spring 2009

Participated in crack formation research involving electrophoretic deposition of CdSe nanoparticles and observed results using video microscopy. Continued to work on self-assembly of binary nanoparticle superlattices and briefly on carbon nanotube hybrid materials.

Dana Farber Cancer Institute, Radiation Oncology Department

Boston, MA

Summer Student, D'Andrea Group

Summer 2005

Assisted lab members in finding gene sequences patterns using bioinformatic techniques to search through NCBI databases in order to understand the proteins involved in the Fanconi Anemia DNA Repair System.

Achievements and Scholarships

Tau Beta Pi, The Engineering Honor Society, Michigan Gamma (Elected 2012)

Dean's List (Fall 2006–Spring 2007, Spring 2008–Fall 2009)

Computing Skills

Programming: C/C++, Fortran, Java, MATLAB, Python, LATEX, Bash, Awk, Gnuplot

Operating Systems: Linux, Mac OS X, Windows

Software: VASP, COMSOL, Thermo-Calc, LabView, Maya, Word, PowerPoint, Excel

Languages

Bilingual in English and Mandarin; Proficient in French