

Jamie K. Huang

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OBJECTIVE

To obtain a position at a technology company that will allow me to develop my professional and analytical skills while pursuing my interests in both business and technology

EDUCATION

Massachusetts Institute of Technology (Cambridge, MA)

Sep 2007 – Feb 2011

Bachelor of Science in Materials Science and Engineering

Relevant Coursework: Materials Selection, Design, & Economics, Materials Project Laboratory, Materials Processing

Cumulative GPA: 4.6/5.0

EXPERIENCE

Xyleco Inc. (Woburn, MA)

Jan 2011 – Present

Materials Scientist

- Leading the materials characterization of Xyleco's patented material
- Developing various pretreatment techniques for Xyleco's material that have the potential to increase production yield by 150%; finalized pretreatment to be implemented in the scale-up plant design upon completion
- Established the Materials Science Analytical Lab by obtaining all necessary equipment and supplies, as well as establishing safety measures and authoring 7 Standard Operating Procedures within 4 months
- Managed acquisition of 7 instruments valued at approximately \$500,000 by performing detailed evaluation and analysis on each instrument
- Worked directly with vendors and negotiated pricing for instruments used in laboratory

Army Research Laboratory (Aberdeen Proving Ground, MD)

Jun 2010 – Aug 2010

Macromolecular Science and Technology Branch Intern

- Independently worked on controlling the wettability of chitosan by functionalizing with various hydrophobic and hydrophilic polymers, which resulted in a paper publication in the 2010 Summer Student Symposium Journal
- Awarded 1st place out of 300+ undergraduate interns by the ARL Fellows after multiple round selections and a presentation to the ARL senior directors

Impact Physics Branch Intern

Jun 2009 – Aug 2009

- Independently developed a method to obtain stress-strain curves for single polyethylene fibers using the NanoUTM test machine
- Presented to the Directorate level selection committee and published an abstract in the 2009 ARL Summer Student Symposium Journal

Ortiz Nanomechanics Laboratory (Cambridge, MA)

Feb 2009 – May 2009

Research Assistant

- Autonomously prepared samples for scanning electron microscopy (SEM) characterization of a deep-sea hydrothermal vent gastropod
- Research culminated in a published paper in the *Proceedings of the National Academy of Sciences*

ACCOMPLISHMENTS/PUBLICATIONS

- Yao, H., Dao, M., Imholt, T., Huang, J., et al., "Protection mechanisms of the iron-plated armor of a deep-sea hydrothermal vent gastropod," *Proceedings of the National Academy of Sciences*, **107**, 987-992 (2010).
- "Design of Biological/Synthetic Hybrid Material Approaches for Army Applications" paper published in the 2010 Summer Student Symposium Journal
- "Development of Novel Characterization Methods to Obtain Loading Rate Effects of Protective Materials" abstract publication in 2009 Summer Student Symposium Journal
- Awarded 1st place out of 300 undergraduates by ARL Fellows (2010)
- IBM Thomas J. Watson scholarship (2007 – 2011)

SKILLS

- **Computer:** JAVA, Mathematica, Kaleidagraph, Microsoft Office
- **Techniques and Instruments:** SEM, FTIR, AFM, DSC, TGA, CHN Analyzer, Particle Size Analyzer, Mercury Porosimetry, Instron test machine, NanoUTM test machine, contact angle measurement
- **Languages:** Conversational Mandarin Chinese

LEADERSHIP/ACTIVITIES

- Society of Undergraduate Materials Scientists Social Chair, Simmons Hall Social Chair, Simmons Hall Lounge Chair
- Kappa Alpha Theta Sorority
- Pottery, Glassblowing, Lacrosse, Archery, Mosaics