Jennifer Hsu

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Education

Massachusetts Institute of Technology (MIT) — Cambridge, MA
B.Sc. in Chemical-Biological Engineering — Graduated: 06/2014
- GPA: 4.9/5.0
- Study Abroad: Benjamin A. Gilman International Scholarship Recipient
  École Polytechnique Fédérale de Lausanne (EPFL), Lausanne, Switzerland — 02/2013 – 07/2013
  Hong Kong University of Science and Technology (HKUST), Hong Kong — 09/2012 – 12/2012

Experience

3M — St Paul, MN
Lean Six Sigma Coach, Optimized Operations Engineer — 07/2014 – Present
- Led project team of 12+ subject matter experts to rewrite strategic Lean Playbook and deployed corporate-wide
- Improved group's travel impact by developing trip management system used for over 120 trips per year
- Restructured department's in-service week to make meetings more impactful towards delivering year-end goals
- Increased factory productivity by reducing changeover time from 13.2 to 4.5 minutes on constrained equipment
- Led $75,000 cost project to qualify non-hazardous waste to be landfilled

EPFL Laboratory for Semiconductor Materials — Lausanne, Switzerland
Research Assistant — 02/2013 – 08/2013
- Investigated possible compatible materials from literature
- Evaluated coatings for nanowires for photocatalytic water-splitting capability and corrosion
- Delivered 4 presentations to research group and project collaborators and wrote summary of trends and results

Honeywell UOP — Des Plaines, IL
Materials Characterization Intern — 06/2012 – 08/2012
- Assembled *in-situ* x-ray diffractometer system with controlled temperature and gas environment
- Collected data thermodynamics and kinetics of reactions and phase transitions with temperature and time
- Analyzed diffraction patterns to characterize catalysts and adsorbents
- Presented results to high-level managers

MIT Langer Lab — Cambridge, MA
Undergraduate Researcher — 01/2011 – 01/2012
- Synthesized, extracted, and characterized drug-loaded nanoparticles to test efficacy on cancer cells
- Created and tested systematic mixtures for drug delivery screening

Sandia National Laboratories (Center for Integrated Nanotechnologies) — Albuquerque, NM
Nano-patterned Surfaces Intern — 06/2011 – 08/2011
- Patterned and functionalized silicon wafer surfaces via click chemistry
- Characterized stamped nano-surfaces using atomic force microscopy (AFM), ellipsometry, and contact angle goniometry
- Improved results by identifying other cleaning and functionalization strategies from scientific literature

Activities/ Leadership

MIT Pistol Team — Cambridge, MA
Big Dog, Webmaster — 09/2010 – 06/2014
- Trained new members and periodically updated team website
- Started a private team Wiki to aid knowledge transfer to new members and preserve important team documents
- Women's air pistol: 1st place team, collegiate nationals, 2014; 3rd place individual, collegiate sectionals, 2014
- Women's sport pistol: 3rd place team, collegiate nationals, 2014; 3rd place individual, collegiate sectionals, 2014
- Standard pistol: 3rd place individual, collegiate sectionals, 2014

MIT Outing Club — Cambridge, MA
Treasurer, Member — 05/2011 – 06/2014
- Managed financial resources through acquiring funding, rentals, reimbursements, and real estate property costs
- Mobilized over $20,000 in club assets, allowing for increased club activity and new large-scale projects

Skills

Computer: Apple, Windows, and Linux OS, Microsoft Office Suite (Word, Excel, PowerPoint, Outlook, Access), Aspen Plus/HYSYS/EDR, SuperPro Designer, Adobe Creative Suite (Photoshop, Illustrator, InDesign, Flash, Dreamweaver), 3D Modeling (SketchUp, Rhinoceros), JACOBIAN, Minitab
Programming: MATLAB, Python, Java, and basic HTML/CSS
Language: intermediate French, conversational Mandarin and Cantonese