Anna Lai

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EDUCATION

Stanford University B.S. + M.S. Mechanical Engineering
Sep 2014 - Jun 2019 GPA: 3.8/4.0
Courses: Energy Systems, Design & Manufacturing, Deep Learning & Computer Vision

Pratt Institute Architecture Intensive
Jul 2012 - Aug 2012

EXPERIENCE

Natron Energy
Mechanical Design Engineer: Sept 2019 - Present
Battery Engineering Intern: Jun 2018 - Jun 2019
Developed assembly and test fixtures, SOPs, and battery interconnect components. Programmed empirical ANSYS electrochemical models to inform cell and module design.

Chevron
Upstream Capability Intern: Jun - Sept 2019
Set KPIs for contractor performance evaluation across global business units. Text mined natural language data and created live dashboards to improve operational efficiency.

Schlumberger
Mechanical Engineering Intern: Jun - Sep 2017
Conceptualized a redundant hydraulic activation system for Sand Control Tools. Conducted reliability analysis, FMEA, and modeled designs in Creo.

Prakash Lab
Undergraduate Researcher: Jun 2015 - Apr 2017
Designed experiments to investigate lattice systems of vapor-mediated interactions between droplets. Developed micro-fluidic devices, motorized optical setups using Arduinos, and image processing software to track droplet movement.

PROJECTS

S3: Designed and built a storage stool with rotating sheet metal formed drawers with custom bushings and welded frame in the Stanford Product Realization Lab.

Nebulate: Worked with an interdisciplinary team to experiment with the limits of sheet plastic to design, prototype, and construct a full installation at the Anderson Collection.

Alternative Energy Systems: Designed and built a thermal management system for an RC car powered by 3-cell $LiFePO_4$ battery pack.

Yog.ai: Developed an application with deep learning approach to enhancing yoga forms by classifying poses using OpenPose keypoint detection and CNNs.

SKILLS

CAD: Solidworks, PTC Creo, AutoCAD, ANSYS, CAM
Design: Illustrator, Photoshop, Painting, Machining, Welding, Casting, Sheet Metal, CNC
Programming: MATLAB, C++, HTML/CSS, Java, Julia, Python, R
Languages: Mandarin, French