

## PROFESSIONAL EXPERIENCE

### **President – Modular Motions LLC, San Mateo, CA**

**Aug 2015-Present**

*Role* Designed a fully automated restaurant. Launched pop-up restaurant to collect user data with mobile app.

### **First Engineer (Mechanical/Controls/Systems Engineer) – L2F Inc, Fremont, CA**

**Nov 2013-July 2015**

*Role* Designed and deployed custom turnkey manufacturing equipment for Apple, Tesla Motors, and other semiconductor, automotive, and food companies. Served as technical lead with customers, responsible for coordinating machine build, directing development of intellectual property and qualifying systems.

- Results*
- Championed programming for a key account on a modular robot system. Qualified ten production lines overseas in Shanghai, China. Project success won subsequent projects and secured funding to grow and hire additional engineers during early growth stage of company.
  - Expanded facilities into two new buildings and helped onboard engineering team.
  - Successfully completed projects include: vision guided robotic work cells for phone testing, aluminum die-cast post processing, chocolate demolding, and solar panel assembly.

### **Lead Engineer, PDM Administrator – CKC Engineering, LLC, San Francisco, CA**

**Oct 2011-Nov 2013**

*Role* Designed and deployed turnkey custom manufacturing equipment for medical and pharmaceutical companies. Generated complete engineering turnover packages; managed fabrication and assembly of equipment to meet customer needs within given timelines.

- Results*
- Led mechanical engineering on 8 successful \$85,000+ production equipment systems within first year.
  - Provided extensive hands-on troubleshooting during machine builds.
  - Standardized company list of design components to reduce lead-time and leverage team experience.
  - Designed several bench-top fixtures and material handling equipment, including reel-to-reel treatment systems, aseptic filling and handling machine, material heat bonding, and electrical testing machines.

### **Manufacturing Engineer – Solyndra, Fremont, CA**

**Sept 2010-Sept 2011**

*Role* Lead the continuous improvement efforts of the maintenance team for the chemical vapor deposition tool. Provided on-call support and troubleshooting for product translation system.

- Results*
- Authored multiple preventative maintenance procedures to standardize work across entire company.
  - Reduced business daily operating cost by \$100,000 with 40% reduction in equipment service time by standardizing best practices, re-organizing team priorities, and coordinating management.
  - Gained in-depth knowledge of the photovoltaic manufacturing process, including several thin-film deposition operations, such as sputtering and thermal evaporation of several semiconductor materials.

## EDUCATION

University of California, Berkeley – BS in Mechanical Engineering, Certificate in Entrepreneurship

**May 2010**

## RELEVANT SKILLS / CERTIFICATIONS / PUBLICATIONS

Automation PLC+HMI (MEAU, Allen Bradley), Robot (MEAU, Fanuc, ABB, Kuka, Universal), Vision (Keyence, Cognex)  
Leadership BUILD Mentor, Boy Scout Advance Camp Director, IAESTE President, Cal Band Volunteer Coordinator  
Design 8 years of CAD modeling: Solidworks, Autodesk, ProE, Photoshop, LabView, GD&T, DFM, DFA  
Programming C, Python, Javascript, MATLAB, SQL, Tableau, Machine Vision-OpenCV  
Certifications RIA Robot Expert, Solidworks Professional CSWP, Engineer-in-Training  
Language English: Native Mandarin Chinese: Basic Proficiency

## ADDENDUM

### Certifications

- Techshop *CNC Programming Tormach* October 2015
- Techshop *Woodshop* October 2015
- EandM *Siemens Education Internet of Things (IoT) on the Factory Floor* October 1, 2015
- EandM *SICK Education ROS* September 17, 2015
- Robotic Industries Association *RIA Robot Expert* 2015
- Mitsubishi *MEAU PLC Basics* Vernon Hills, IL 2014
- Mitsubishi *MEAU Robot Programming Basics* Vernon Hills, IL 2014
- Royal Automation *Allen Bradley PLC Programming* San Ramon, CA 2014
- Cognex *In-Sight Explorer Easybuilder* Los Angeles, CA 2013
- Cognex *In-Sight Explorer Spreadsheet Advanced* Los Angeles, CA 2013
- National Council of Examiners for Engineering and Surveying *Engineer-In-Training* 2013
- Dassault Systems *Certified Solidworks Professional* 2013
- Hawkridge Systems *Solidworks Advanced Assembly* September 26-27, 2012
- Hawkridge Systems *Solidworks PDMWorks User* September 13, 2012
- Hawkridge Systems *Solidworks Advanced Detailing* August 22, 2012
- Hawkridge Systems *Solidworks PDM Workgroup Admin* July 26, 2012
- Hawkridge Systems *Solidworks Advanced Modeling* July 23-24, 2012
- Techshop *Sheet Metal* 2011
- Techshop *Sandblasting and Powdercoating* 2011
- Techshop *CNC Vinyl Cutter* 2011
- Techshop *CNC Embroidery* 2011
- Techshop *Laser Cutting* 2011

### Publications & Conferences

- *Robotic Systems and Sciences* University of California, Berkeley 2014
- *Vortex shedding induced energy harvesting from piezoelectric materials in HVAC flows.* Smart Materials and Structures Vol. 21. (2010)

### Awards

- Facebook *1st Place Data Visualization Competition with Tableau* 2013
- University of California, Berkeley Alumni Association *Leadership Award* 2007
- Pacific Gas & Electric *Scholarship* 2006
- American Legion *Boys' State* 2006
- National Elks Lodge *Most Valuable Scholar* 2006
- Boy Scouts of America *Eagle Scout Rank with 6 Palms* 2006
- Uechi-Ryu *First Degree Black Belt* 2005