

BENJAMIN W. MOLINARI

Msc in Energy Engineering

@ ben.molinari@gmail.com

(707) 302-4932


Napa, California

 [LinkedIn](#)

PROFESSIONAL EXPERIENCE

Process Engineer

Keysight Technologies


 11/2014 – 06/2017


 Santa Rosa, California

- Provided primary engineering support of Surface Mount Technology Rework department, repairing damaged circuit boards and assisting engineers in new product circuit builds
- Co-developed and implemented online job organization and process flow tracking systems
- Trained to lead and develop microcircuit manufacturing process of advanced circuit boards

Sustainability Intern

Student Housing

 10/2011 – 06/2012

 UC Davis


- Gave presentations and designed challenges to promote sustainable lifestyles in university housing

PROJECT EXPERIENCE

Master's Thesis- UPC/Institut de Recerca en Energia de Catalunya (IREC)

Electrochem. Impedance Spectroscopy of ZnI_2

Flow Batteries

 02/2019 – 07/2019


 Barcelona, Spain

- Designed and built redox flow cell, designed and synthesized electrolytic solutions and electrodes, ran impedance spectroscopy measurements on cell

Research project- UPC/CITCEA

Literature Study on Electrochemical Kinetics

of Li-ion cells


 10/2018 – 12/2018


 Barcelona, Spain

- Studied how EIS is used to understand molecular structural changes of battery cells which occur during charge/discharge

Senior Project- UC Davis/Agilent Technologies

Diffusion Bonding of Nickel-Iron Alloy

 11/2013 – 06/2014

 Davis, California


- Researched feasibility of advanced machining process to improve manufacturing efficiency

EDUCATION

EIT InnoEnergy Double Degree Program- Smart Electrical Networks and Systems

MSc in Energy Engineering


Universitat Politècnica de Catalunya


 09/2018 – 07/2019

 Barcelona, Spain

MSc in Energy Innovation

KTH Royal Institute of Technology


 06/2017 – 08/2018

 Stockholm, Sweden

Bachelor of Science-

Materials Science and Engineering


University of California - Davis

 09/2010 – 07/2014

 Davis, California, USA

LEADERSHIP INVOLVEMENT


NextGen program, Core team member


 2016 – 2017

 Keysight Tech.

Led site-wide young employee retention and professional development program


Keysight After-School program, Team Leader

 2015 – 2017

 Keysight Tech.

Built personal science and technology-focused kits with low-income elementary school children on a weekly basis

Materials Advantage student club, Member

 2013 – 2014

 UC Davis

Promoted interest in Materials Science among students from elementary school to college years

SKILLS

High Proficiency

Software- Matlab, LaTeX editor, EC Labs, Origin, MS Office

Laboratory- Bio logic multichannel potentiostat, peristaltic pump, glove box, fume hood

Circuit board manufacturing- PDR IR rework machine, GPD automatic dispensing

Basic Experience

Software- Simulink, Creo Elements drafting and modeling, ZView

INTERESTS

Outdoors, Music, Guitar, Basketball