

# SEMI 211

## Education

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- Master of Science in Chemistry (Semiconductor Processing and Photovoltaics) Jun 2018
- University of Oregon, Eugene, OR
- Bachelor of Science in Chemical Engineering Jun 2017
- Oregon State University, Corvallis, OR

## Experience

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- Research Assistant** Oregon State University, Research Group of Dr. "David" Xiulei Ji Jan 2016-Jun 2017
- Explored optimal carbon based catalysts for use in oxygen reduction, oxygen evolution, and hydrogen evolution reactions by synthesizing over 50 combinations of organic and metal chemical compounds
  - Determined the catalytic properties and performance of test samples against a standard (i.e. Platinum) by setting up and operating rotating disk electrodes to perform cyclic and linear sweep voltammetry
  - Assembled lithium, sodium, and potassium ion batteries working in an argon purged glove box
  - Extracted information for developing new methodologies and finding new materials to test for catalytic properties by performing literature searches in the field of electrochemistry
  - Kept detailed records of experiments, waste disposal, and observations in a lab notebook which were used to repeat and modify experiments. These results were then used to determine a pathway for future combinations of materials to test
- Resident Assistant** Oregon State University Sept 2015-Jun 2016
- Managed a University residence hall wing of 34 diverse undergraduate students by resolving conduct issues and building community through engagement in floor programs and university events
  - Promoted academic excellence, addressed student needs, and encouraged inclusivity among residents in ways that supported the missions of the University and the Department of Housing and Residence Life by running monthly residence hall programs
  - Relayed information to residents in building by collaborating with University Marketing Department to advertise for events and create bulletin boards
  - Performed duties such as addressing student and staff questions, and responding to emergency situations involving residents and other building facilities
- Road Worker** Columbia County Road Department Jun 2013-2016
- Assisted in directing motorist through work zones to ensure the safety of the work crew and the public by organizing, planning, and setting up traffic signs and direction through an active work zones stretching up to 8 miles
  - Accountable for keeping track of inventory and purchasing materials using a company credit cards for materials up to \$1,000
  - Actively carried out safety protocols when using machinery such as: paver, pneumatic roller, road sweeper, and paint striper
  - Collaborated with a crew of 10 members using succinct communication to ensure safety on job site

## Skills

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- Intermediate experience with (MATLAB, Visio, Aspen HYSYS, Aspen Plus)