

## EDUCATION

### University of Waterloo

Master of Environmental Studies, Sustainability Management (Industrial Ecology Group)

September 2020 - Present

### University of British Columbia

BASc, Materials Engineering (specialization in Minerals and Metals Extraction), Minor in Commerce, Co-op

September 2015 - May 2020

## EXPERIENCE

### Redwood Materials

Chemical Engineer | Engineering Team

Carson City, NV

June-August 2020

- Developed comprehensive VBA heat & mass balance model of a novel electric-vehicle battery recycling plant
- Worked cross-functionally with finance team to select the most cost-competitive vendor for process reagents
- Performed material selection, sizing, and cost analysis for equipment used in full-scale operation
- Generated and analyzed process data used to optimize capital and operational cost while improving overall efficiency

### Apple

Recycling Technologies Engineer | Environmental Technologies Team

Cupertino, CA

January-August 2019

- Developed and lead implementation of corporate closed-loop strategy on zinc for low-carbon recycled supply chains
- Supported corporate closed-loop initiative by providing technical expertise on copper, gold, lithium, and other materials
- Conducted market research of global commodities markets evaluating market size, prominent players, and price outlook
- Worked with finance, procurement, product design, and manufacturing teams to successfully implement NPI projects

### The Hydromet Group

Research Assistant | Dr. David Dreisinger

Vancouver, BC

May-August 2018

- Conducted pressure oxidation experiments for cesium leaching from soil samples and analyzed data from results
- Performed bench-scale lead electrowinning experiments for optimization of pilot plant testing
- Executed and collected experimental results for manganese precipitation and improved control of crystal size

### McIntosh Lalani Engineering

Materials Testing Technician | Soils Division

Calgary, AB

May-December 2017

- Performed density tests on soils and aggregates using analytical equipment at six new housing development sites
- Consulted with clients of on-site geotechnical problems using test results and provided suggestions to resolve issues
- Drafted daily project updates for management outlining key project milestones, complications, and resolution

## LEADERSHIP

### UBC Materials Engineering Undergraduate Club

President

May 2019 — April 2020

- Lead a team of eleven executives in organizing professional development events, research programs, and social outings
- Served as an ambassador for undergraduates Materials Engineering students and advocated for student support
- Successfully implemented a new social media platform aimed at promoting events happening in the department

## TECHNICAL PROJECTS

### Senior Capstone Project

Design and Economic Feasibility of Gold Leaching Plant

September - December 2019

- Conducted design and economic viability of three technically feasible gold leaching processes for fabricated mine along with four group members under the supervision of Dr. Dreisinger and Dr. West-Sells
- Developed sizing and economic model of the atmospheric leaching process with CIP and neutralization operations

## SKILLS & INTEREST

**Technical:** LCA (ISO:14044), VBA, Macros, Microsoft Suite, Python

**Interest:** Sustainability, Commodities, Economics, Skiing, Surfing, Hiking, Running

**Languages:** Fluent in English and French