

Obtain full time job or internship related to chemical engineering to apply material from coursework, grow work experience, analytical skills, and leadership abilities.

## **EDUCATION**

# **University of Massachusetts Amherst**

Amherst, MA

## College of Engineering, Commonwealth Honors College

Bachelor of Science in Chemical Engineering

Candidate, May 2019

- Cumulative GPA Dean's List; Sponsorship to attend 2016 San Francisco AIChE conference; Abigail Adams Scholarship: Merit based tuition waiver; Commonwealth Honors College Research Grant
- Relevant courses: Thermodynamics, Kinetics, Fluid Mechanics, Heat and Mass Transfer, Separations, Process Controls, Process Design, Molecular bio, Programing in java, Microfluidic design/analysis, Scientific Computing

## Hong Kong University of Science and Technology

Hong Kong

• 1 semester study abroad program, School of Engineering

Spring 2017

### **WORK EXPERIENCE**

## **Alnylam Pharmaceuticals**

Cambridge, MA

Process Chemistry Intern

Summer 2016, Summer 2017, Summer 2018

- Learned oligonucleotide synthesis and downstream processing including automated solid phase synthesis, HPLC purification, ultrafiltration, and lyophilizing. Learned analytical techniques including HPLC and LCMS.
- Ran synthesis and purification using different polymer supports and compared product purity and yield. Research was presented at the Biotech Innovation Organization conference by coworker.
- Wrote scalable synthesis method for Unicorn software and reagents preparation calculator in Visual Basic.

### **University of Massachusetts Amherst**

Amherst, MA

Teachers Assistant - Thermodynamics 2

September 2018 - Present

• Hold office hours to help students with homework. Grade homework.

#### **iCracked**

Owner-operator

- Own and operate a sole proprietorship repairing mobile devices and tablets
- Customer sales and service, repair of various electronic devices, inventory management, and accounting

### REASERCH

# **University of Massachusetts Amherst**

Amherst, MA

Undergraduate research, Perry Lab

September 2018 - Present

- Designing and building microfluidic devices by photolithography and soft lithography to track protein folding using hydrodynamic focusing and smFRET.
- Received Commonwealth Honors College Grant to fund research for an undergraduate thesis.

## **University of Massachusetts Amherst**

Amherst, MA

Chem-E-Car competition, Team captain, 3<sup>rd</sup> place at 2018 AIChE regional conference

Spring 2018

- Built car powered and stopped by chemical reaction to go a distance and hold a weight that is specified 1 hour before competition. Learned battery chemistry, Arduino programing, and 3D printing.
- 3<sup>rd</sup> place at 2018 AIChE regional conference. Qualified for 2018 National Conference competition.

# SKILLS

• MS office • Matlab • Java • HPLC/LCMS • 3D printing • Electronics repair • RC circuits • Photolithography • microfluidics • Florescence microscopy

### **ACTIVITIES**

# **American Institute of Chemical Engineers**

Fall 2015 - Present

• Attend regional and national conferences. Organize annual beer brew competition.