

## EDUCATION

**Michigan State University, East Lansing** – *Chem. Eng., B.S.;*  
*Minor: Mathematics; GPA: 3.58*

Aug 2015 – May 2019

**Michigan State University, East Lansing** – *Comp. Mth/Sci/Eng,*  
*Ph.D.; GPA: 3.87*

Jan 2022 – Present

## WORK EXPERIENCE

**Zeeland Farm Services, Inc; Zeeland, MI** – *Project Engineer*

Sep 2020 – Dec 2021

Managed time/costs of capital projects for a 1050 ton per day soy crush plant and its sister oil refinery.

- E.g. Soy Oil/Miscella Economizer, Silica Gel Loss-in-Weight Feeder

Managed programming and controls of plants' instrumentation and programmable logic controller.

Under OSHA Process Safety Management, kept up to date P&IDs, Management of Change, and Mechanical Integrity documentation.

**Zeeland Farm Services, Inc; Zeeland, MI** – *Process Technician*

Aug 2019 – Sep 2020

Responsible for operation and maintenance of a soy crush plant.

Applied safe working practices, e.g. Lock-Out/Tag-Out, Confined Space and Hot Work Permits.

**MSU Math Learning Center; East Lansing, MI** – *Supervisor*

Aug 2016 – May 2019

Managed the operation of a college-level math tutoring center.

Lead around 20 tutors in providing students with topic-specific help in all college-level math courses.

## RESEARCH EXPERIENCE

**The Complex Fluids Group, MSU** – *Graduate Research Assistant*

Jan 2022 – Present

Research Focus: Fluid-structure interactions and soft body deformation simulations.

Application Focus: Fish locomotion and blood flow.

## **AI and Data enabled predictive Multiscale Modeling across STEM NSF Research Traineeship – Trainee**

Aug 2023 – Present

Participated in short courses: “Differential Privacy” and “Sublinear-Time Algorithms for Approximating Functions of Many Variables”

## **TEACHING EXPERIENCE**

### **CMSE 201 – Graduate Teaching Assistant**

Jan 2022 – May 2023

### **MTH 103A/B – Undergraduate Learning Assistant**

Aug 2018 – May 2019

## **SERVICE EXPERIENCE**

### **CMSE Graduate Student Organization – President**

Aug 2023 – Aug 2024

Rebooted the department graduate student organization.

Helped get graduate representatives on department committees.

### **MSU Council of Graduate Students – CMSE Representative**

Aug 2023 – May 2024

Represent the voice of the graduate student body for the CMSE department to the council.

Represented graduate students on the MSU Bikes Advisory Council.

### **MSU Council of Graduate Students – Treasurer**

May 2024 – Present

Manage the council’s account and annual budget of ~\$250,000.

Chair of the COGS Finance Committee and MSU Radio Board.

### **CMSE Peer Mentor Program – Mentor**

Aug 2023 – Present

Assists in the transition into graduate school for the first-year Ph.D. students in the CMSE Department.

## **AWARDS AND CERTIFICATIONS**

### **Boy Scouts of America – Eagle Scout**

Dec 2012

### **NFPA 70E – Electrical Safety/ Arc Flash Training**

Mar 2021

**SAICHe** – *Safety Training Certification*

Dust Explosion Safety – Mar 2017

The Role of Nitrogen in Process Safety – Mar 2017

**MSU Dept. of CMSE** – *Outstanding Service Award*

Aug 2024