

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