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EDUCATION

Michigan State University (MSU), East Lansing, MI

- Master of Science: Biosystems Engineering
 - GPA: 3.75 / 4.0
- Bachelor of Science: Biosystems Engineering
 - GPA: 3.5 / 4.0; Dean's List; Honors College Member
 - Engineer in Training (EIT)

December 2022

December 2019

PROFESSIONAL & LEADERSHIP EXPERIENCE

Steven I. Safferman (Ph.D., P.E.) Research Laboratory, *Research Assistant and Lab Manager* MSU, 02/2017 to Present

- Engineered a Mobile Macropore Unit by scaling up the operation and utilizing existing Matlab codes to accurately identify and quantify Macropore on-site and to maximize field testing capability and efficiency.
- Designed adsorption media contact systems and created a guideline for treating Michigan winery wastewater through literature reviews and a laboratory study to effectively remove nutrients from the wastewater to meet regulatory standards. This resulted in a land use reduction of 80% in comparison to land application.
- Evaluated the impact of pretreatment methods on biogas yield and production rate for a feasibility study of an anaerobic digester at GLWA by administering the system implementation, maintenance, logistics, and thermal analysis of the product.
- Researched phosphorus adsorption media best suited for removing phosphorus from tile drainage in Michigan cornfield by examining existing literature and conducted isotherm and column studies.
- Presented "Soluble Phosphorus Sorption from Tile Drainage" and "Laboratory Study on the Vertical Movement of Organic and Inorganic Phosphorus-based Fertilizers in Michigan's Soil" at the Mid-Michigan Symposium for Undergraduate Research Experiences and UURAF on July 24th, 2018 and July 26th, 2017.

Thai Student Association, *President*

MSU, 06/2018 to 05/2019

- Organized events and meetings to promote and create a better understanding of Thai culture to the East Lansing community and support Thai students at MSU.

Office of Cultural and Academic Transitions, *Intercultural Aide*

MSU, 05/2018 to 05/2019

- Facilitated round table discussions, community outreach, community service events, and floor events in a residence hall to unite students across differences to develop genuine relationships, build community, and promote student success.

Engineering Summer Undergraduate Research Experience, *Research Assistant*

MSU, 05-08/2017 and 2018

- Learned about graduate school by engaging in professional development activities and weekly seminars.
- Conducted research studies on Vertical Movement of Organic and Inorganic Phosphorus-based Fertilizers in Michigan's soil and Soluble Phosphorus Sorption Media from Agricultural Tile Drainage under the mentorship of Dr. Safferman.

Residential Initiative on the Study of the Environment (RISE), *Mentor*

MSU, 08/2016 to 05/2017

- Helped incoming RISE students to have a successful transition and promote student success by providing academic and personal guidance and encouragement through office hours, monthly events, and workshops.

International Academic Orientation Program (IAOP), *Leader*

MSU, 08/2016 and 2017

- Aided new international students in their transition to MSU by leading group activities and case studies.

English Language Center Mentoring Program (ELC), *Mentor*

MSU, 08-12/2016

- Aided international students at the ELC adjust to the academic and social culture of MSU by facilitating group activities and studies, encouraging social interactions, and developing genuine relationships.

VOLUNTEER WORK

Global Youth Advancement Summit, *Staff*

MSU, 06/11-13/2019

- Assisted 200 young leaders from more than 35 countries to address and create several innovative solutions for immediate challenges facing people around the world through seminars, workshops, and presentations.

Office for International Students and Scholars students' events, *Volunteer*

MSU, 09/2015 to 08/2018

- Taught Thai culture and language to local people to create an understanding and connection between our cultures.

Bailey Hoop-house, *Volunteer*

MSU, 05-08/2015

- Participated in day-to-day responsibilities including planting, pest control, and harvesting to learn about sustainability.

SCHOLARSHIP & SKILLS

Royal Thai Scholarship, *A full-ride scholarship recipient*

08/2014 to 01/2020

- Selection criteria based on an academic exam score, as well as an interview with the Office of Civil Service Commission.

Languages: Thai (native) and English (proficient).

Technical skills: Bentley PowerGeopak & AutoCad software (proficient) and MATLAB (proficient).