Ethan Rietz

ewrietz@gmail.com
https://erietz.github.io

Education

Oregon State University 2021-PRES
Bachelor of Science: Computer Science (GPA: 4.0) Corvallis, Oregon

Indiana University Bloomington 2019 – 2021
Ph.D. Student: Physical Chemistry & Scientific Computing (GPA: 3.76) Bloomington, Indiana

Iowa State University 2013 – 2017
Bachelor of Science: Biochemistry (GPA: 3.51) Ames, Iowa

Professional

Werner Enterprises OCT 2021 - PRES
Software Intern Omaha, Nebraska
I work an agile/scrum team on developing mobile applications using the ionic framework, typescript, angular, and C# for the backend.

Werner Enterprises APR - OCT 2021
Software QA Intern Omaha, Nebraska
Tested APIs, UIs, and mobile devices using a variety of testing methods.

Agilent Technologies 2017 – 2019
Manufacturing Associate Ankeny, Iowa
Manufactured liquid consumable products (gels, buffers, DNA/RNA ladders and markers) for Agilent's capillary electrophoresis instruments in an aseptic environment.

Limnology Laboratory 2014 – 2015
Chemistry Technician Ames, Iowa
Worked in a laboratory certified by the Iowa Department of Natural Resources to analyze water nutrients for the Iowa Lakes Survey Monitoring Program.

Research

Indiana University 2019-2020
Research with Professor Srinivasan Iyengar Bloomington, Indiana

- Worked on high performance Linux computing clusters to study non-classical carbocation systems computationally.
- Used *Ab initio* molecular dynamics, density functional theory, and vibrational spectroscopy methods to understand energy redistribution in anomalous carbocations and hydrogen bonded systems.

Iowa State University 2016
Research with Professor Levi Stanley Ames, Iowa
Studied the catalytic activity of metal-organic framework compounds and asked if the steric and electronic properties of MOFs are tunable upon functionalization of the linker units.

Teaching

Associate Instructor: Head AI FALL 2020
C117: Principals of Chemistry and Biochemistry Indiana University Bloomington

- Oversaw four Associate Instructors, two undergraduate teaching assistants, and led weekly meetings
- Organized over 25 instructors to proctor examinations
- Made all exams, worksheets, and Canvas material for the course for over 600 students

Associate Instructor SPRING 2020
C117: Principals of Chemistry and Biochemistry Indiana University Bloomington

Associate Instructor FALL 2019
C103: Introduction to Chemical Principals Indiana University Bloomington

Skills

Programming Languages	C, Python, Javascript/Typescript, HTML/CSS, C#, Bash/Zsh, SQL
Tools	Git, Make, MySQL, MongoDB, Ansible, Docker, Postman, Vim
Frontend Frameworks	React and Angular