

Ethan Rietz

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<https://erietz.github.io>

Education

Oregon State University <i>Bachelor of Science: Computer Science (GPA: 4.0)</i>	2021 – 2022 Corvallis, Oregon
Indiana University Bloomington <i>Ph.D. Student: Physical Chemistry & Scientific Computing (GPA: 3.76)</i>	2019 – 2021 Bloomington, Indiana
Iowa State University <i>Bachelor of Science: Biochemistry (GPA: 3.51)</i>	2013 – 2017 Ames, Iowa

Professional

Werner Enterprises <i>Software Intern</i> <ul style="list-style-type: none">• Worked in C# on an application where financial and other company data was synced in real time between multiple systems.• Developed mobile applications using the Ionic framework, TypeScript, Angular, and C# for the backend.• Wrote extensive unit and integration test suites using MSTest and worked with technologies such as Azure cloud services, SQL Server, Entity Framework, Visual Studio, and Postman.	OCT 2021 - Nov 2022 Omaha, Nebraska
Werner Enterprises <i>Software QA Intern</i> <p>Tested APIs, UIs, and mobile devices using a variety of automated and manual testing methods.</p>	APR - OCT 2021 Omaha, Nebraska
Agilent Technologies <i>Manufacturing Associate</i> <p>Manufactured liquid consumable products (gels, buffers, DNA/RNA ladders and markers) for Agilent's capillary electrophoresis instruments in an aseptic environment.</p>	2017 – 2019 Ankeny, Iowa
Limnology Laboratory <i>Chemistry Technician</i> <p>Worked in a laboratory certified by the Iowa Department of Natural Resources to analyze water nutrients for the Iowa Lakes Survey Monitoring Program.</p>	2014 – 2015 Ames, Iowa

Research

Indiana University <i>Research with Professor Srinivasan Iyengar</i> <ul style="list-style-type: none">• Worked on high performance Linux computing clusters to study non-classical carbocation systems computationally.• Used <i>Ab initio</i> molecular dynamics, density functional theory, and vibrational spectroscopy methods to understand energy redistribution in anomalous carbocations and hydrogen bonded systems.	2019-2020 Bloomington, Indiana
Iowa State University <i>Research with Professor Levi Stanley</i> <p>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.</p>	2016 Ames, Iowa

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 Tools

C#, Javascript/Typescript, Python, C, HTML/CSS, Bash/Zsh, SQL
Git, Make, Azure, MySQL, MongoDB, Ansible, Docker, Postman, Vim, GitHub Actions

Frontend Frameworks

React and Angular