Christian Lentz

Brookline, MA | 262-488-2205
Portfolio | christianlentz234@gmail.com | LinkedIn

Education

Macalester College — St. Paul, Minnesota
BA, Mathematics and Computer Science — 09/2020 - 05/2024

- Cumulative GPA: 3.96 / 4.0
- Summa Cum Laude
- Honors Thesis: *Persistent Relative Homology for Topological Data Analysis*

Oxford University — Oxford, England, United Kingdom
Visiting Student, Mathematics — 01/2023 - 06/2023

- Relevant Coursework: Real Analysis, Groups and Group Actions, Number Theory

University of Wisconsin — Madison, Wisconsin
Visiting Student, Mathematics — 06/2022 - 08/2022

- Relevant Coursework: Ordinary Differential Equations, Combinatorics

Experience

Maverick Software Consulting — Minneapolis, MN
QA Software Engineer, Internship — 06/2022 - 01/2023

- Contracted with TravelNet Solutions of Cottage Grove, MN.
- Reference: Tracy Olhausen, Senior Director of Quality Assurance.
- Manual / regression testing and test case documentation for frontend and backend.
- Contributed to automated test framework using JavaScript, Playwright, CSS.
- Experience with agile / scrum methodologies.
- Frequent participation with code review and GitHub issue management.

Macalester College — St. Paul, MN
Teaching Assistant — 01/2022 - 05/2024

- Courses: Linear Algebra, Statistical Modeling, Computational Geometry, Algorithms.

University of Minnesota — Minneapolis, MN
Research Assistant — 05/2023 - 07/2023

- Research in Algebraic and Computational Topology, project advised by Lori Ziegelmeier (Macalester Col.) and Greg Henselman-Petrusek (PNNL).
- In progress contribution to open-source software Open Applied Topology

Skills

Languages | Python , Java, JavaScript, R , Rust , C

Front End | HTML, CSS

Backend | Node.js, Google Firebase

Miscellaneous | VS Code, Git/GitHub, Jira, Mathematica

Data Science | NumPy, SciPy, matplotlib, RStudio, dplyr, tidyr, ggplot

General | customer service, teaching, presentation, agile/scrum, technical & academic writing, literature review

Talks & Presentations

A Computational Approach for Persistent Relative Homology

- 2023 Fall Meeting of the Mathematical Association of America NCS**,** University of Minnesota-Duluth, September 2023
- Macalester College Summer Showcase, St. Paul, MN, October 2023
- AIM-AMS Special Session on Applied Topology Beyond Persistence Diagrams, 2024 Joint Mathematics Meetings*,* San Francisco, CA, January 2024
- PME Undergraduate Student Poster Session, 2024 Joint Mathematics Meetings, San Francisco, CA, January 2024

Persistent Relative Homology for Topological Data Analysis

- Undergraduate Honors Defense, Macalester College Department of Mathematics, Statistics and Computer Science, St. Paul, MN, April 2024

Awards & Honors

Konhauser Achievement Award, Mathematics — Macalester College, 2024
For outstanding academic record and demonstrated dedication to and interest in the field.