

Xavier Silva

(269) 373-1930 ■ xavierwsilva@gmail.com ■ www.linkedin.com/in/xwsilva ■ <https://rochx.github.io/>

Education

Kalamazoo College

Bachelor of Arts, 2024

Mathematics and Computer Science double major

GPA: 3.988

Recognitions: Honors in Mathematics (*summa cum laude*), Heyl Full Tuition Scholarship, Phi Beta Kappa

Relevant Projects:

Icosahedral Virus Transitions (Senior Thesis)

- Developed a multi-threaded data analysis algorithm in Python to understand how certain viruses transform over time.
- Created technical documentation for research mentors to continue research.
- Invited research presenter to Kalamazoo College Board of Trustees.
- Nominated speaker at the 2023 West Michigan Regional Undergraduate Science Research Conference with over 150 in attendance.

HornetHQ 2.0 Prototype

- Developed and presented a prototype of an improved course selection website using React to engage with issues of the current course selection software at Kalamazoo College.
- Collaborated in a team of over 12 people.

Relevant Coursework:

Advanced Software Development

- Obtained hands-on experience with Agile methodology in small teams.

Data Science, Machine Learning

- Learned data analysis techniques to explore complicated data sets.
- Analyzed data sets using scikit-learn and selected appropriate models to evaluate them.

Budapest Semesters In Mathematics, Hungarian Study Abroad

2022

- Advanced mathematics program that provides an opportunity for North American students to learn mathematics in the Hungarian tradition.

Experience

Teaching Assistant for Kalamazoo College Mathematics Classes

2023 - 2024

- Created learning environments that encourage student's critical thinking.
- Conducted weekly independent office hours to guide students towards optimal solutions.
- Graded homework for mathematics classes, required working closely with professors.
- Delivered accurate and concise feedback to over 20 students, facilitating significant improvements in mathematical proof writing.

Mathematics Departmental Student Advisor at Kalamazoo College

2023 - 2024

- Served as an academic role model by representing the mathematics department in a faculty-appointed position.
- Navigated College systems to provide helpful guidance to peers on course planning, class registration, major exploration, and academic success.

Teaching Assistant for Kalamazoo College Computer Science Classes

2022

- Assisted students in computer science labs leading to significant grade improvements.
- Facilitated a learning environment where students were able to discover solutions for themselves by holding weekly independent office hours.

Skills

Computer Languages: Java, C++, Python, R with Tidyverse package, HTML, CSS, JavaScript, React

Computer Software: Git/GitHub, Linux, MacOS, JetBrains IDEs, VS Code, LaTeX, Microsoft Office

Computer Hardware: Built and repaired multiple personal computers, Computer Networks

Community Involvement

Percussion Instructor at Portage Northern High School

2023 - 2024

- Facilitated a learning environment for over 30 students at a professional level.

North American Guild of Change Ringers Member

2022 - Present

- Jeff Smith Young Ringer Award 2024