

Katherine Kiessler
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EDUCATION**GPA: 3.7/4.0****UNIVERSITY OF MICHIGAN**

Ann Arbor, MI

Bachelor of Engineering and Bachelor of Fine Arts

May 2025

- Major(s): Computer Science, Dance

Relevant Coursework: Web Systems, Foundations of Computer Science, Computer Security, Data Structures and Algorithms, Programming and Data Structures, Discrete Mathematics

Honors: University Honors, 2020-2022; Dean's List, 2020-2022; William J. Branstrom Freshman Prize (Ranked in upper five percent of freshman class), 2020

SKILLS

- Proficient: C++, Python
- Familiar: JavaScript, HTML, Vue, CSS
- Tools: Github, Visual Studio Code
- Areas of proficiency by Summer 2023: Shell scripting, SQL for database queries, Flask web and React frameworks, Hadoop (MapReduce)

EXPERIENCE**AUNALYTICS**

Traverse City, MI

Software Engineer Intern

May 2022 – August 2022

- Utilized JavaScript to identify and troubleshoot bugs on Aunalytic's website, presenting solutions for improved functionality.
- Developed and enhanced website design using CSS and HTML, with a focus on optimizing user interaction and satisfaction.
- Implemented effective use of tools such as GitHub to collaborate and contribute to group projects.
- Facilitated regular meetings with colleagues to collaborate on individual projects and assisted in cultivating a collaborative environment
- Leveraged previous experience in back-end development to seamlessly integrate improvements to the website, while staying connected with front-end experts to stay up to date.

DANCE ARTS ACADEMY

Traverse City, MI

Guest Teacher

May 2020 – Present

- Effectively designed and implemented daily lesson plans for dance students of various levels.
- Prepared the dance team for competitions by supervising rehearsals and cleaning choreography.
- Fostered a welcoming environment for students by mentoring and offering individual corrections.

PROJECTS**Padding Oracle Attack (Python)**

- Wrote a program to decrypt a CBC-encrypted message by modifying ciphertext one bit at a time to discover the original bit value based on the server's response of a padding or MAC error.

XSS, SQL Injection, and CSRF Attack (HTML, SQL, JavaScript)

- Created short segments of code to attack a vulnerable website to reveal valuable information about the website's users and trick clients into logging onto an attacker's interface.

Star Wars Movie Script (C++)

- Read in a file containing information about troops of Jedis and Siths to generate a "movie script" output of battles on various planets and determine the outcome of each war.