Katherine (Katie) Sandeen
904.386.4846 | sandeenk@oregonstate.edu
linkedin.com/in/sandeenk | github.com/SandKat214

Education

Oregon State University   Expected Fall 2025

Computer Science Bachelor of Science, GPA: 4.0
Coursework: *Data Structures | Web Development | Assembly | Intro to Databases | Algorithms*

Experience

Data Structures Course Teaching Assistant | Oregon State University   April 2024 – Present

- Partner with professor to optimize learning for up to 400 students
- Mentor students in mastering complex concepts, including AVL trees, heaps, and hash maps
- Oversee and facilitate class discussion boards to actively address and resolve inquiries
- Conduct open office hours to deliver personalized support regarding advanced course topics
- Evaluate student work, with a focus on analyzing time complexity and algorithmic efficiency

Technical Skills

Languages:	Python, JavaScript, HTML, CSS, SQL, Assembly
Libraries/Frameworks:	React, Node, Express, Chakra UI, Pygame
Tools/Platforms:	Git, GitHub, Figma
Databases:	MongoDB, MariaDB, MySQL

Projects

Chess GUI | *Python, Pygame*   [github.com/SandKat214/Chess]

- Engineered using principles of object-oriented programming for robust design
- Created system that translates coordinates into grid positions to accurately render the board
- Implemented mouse click tracking to capture user input for movement and pawn promotion
- Designed pop-up messaging system to provide immediate feedback on moves and outcomes

Web Dev Portfolio | [github.com/SandKat214/WebDevPortfolio]
JavaScript, HTML, CSS, React, Express, Node, MongoDB

- Developed single-page app with dynamic GUI for executing CRUD ops on an art collection
- Utilized MongoDB as the database management system to store art data efficiently
- Engineered a RESTful API to handle each HTTP request independently
- Constructed the frontend view and UI using React framework for a responsive experience

Planetary Liberators | [github.com/SandKat214/PlanetaryLiberatorsDatabaseApp]
JavaScript, SQL, React, Express, Node, MariaDB, Chakra UI

- Collaborated in a team to design & develop a database-driven recruitment app for Helldivers2
- Implemented Chakra UI for frontend styling, utilizing React for a fast and responsive design
- Utilized MariaDB for backend storage, managing user data, teams, features, and relationships
- Integrated frontend w/ backend API using Express & SQL commands for seamless data access