

# Keith Allen

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Sodus, NY

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Github: <https://github.com/KeithTAllen>

## EDUCATION

*Bachelor of Science, Applied Mathematics & Computer Science*  
SUNY Oswego Honors College, Oswego, NY, December 2023

## WORK and RESEARCH EXPERIENCE

*Automated Ontology Design* Jan 2023 to Present  
Since January I have worked with a team building a Dialog Based Ontology Learner (DBOL). The DBOL is a work in progress standalone system that assists a domain expert in building Basic Formal Ontology (BFO) compliant domain ontologies.

**Independent Study** Spring 2023 and Fall 2023

The spring was spent learning background information about BFO and familiarizing myself with the DBOL. This fall I have been responsible for

- Continuing to make improvements to the DBOL following weekly meetings.
- Organizing and administering a second round of user testing following changes.
- Created various tools to assist in evaluating results from the user testing. Including a Katz similarity metric, as well as CSV building helpers.

**ATR Center Intern/DoD Contractor** May 2023 to August 2023

University of Dayton, Dayton, OH

Working with the same team from the independent study, I continued our work on the DBOL performing collaborative research with Air Force Research Lab (AFRL) Sensors Directorate. Over the summer I was tasked with

- Updating the code base in accordance with weekly team meetings.
- Creating documentation and user manuals for the system and its sub parts.
- Organizing and administering user testing of the system.

*Student Operations Staff (SOS)* January 2021 to Present  
Residence Life and Housing SUNY Oswego, Oswego, NY

**SOS Coordinator** August 2022 to Present

As an SOS, I perform the same responsibilities of a desk attendant while additionally

- Scheduling shifts and helping students resolve scheduling conflicts.
- Training new desk attendants and acting as a mentor.
- Improving desk operations by reworking desk protocols, as well as improving the physical and digital environments of the desk.

**Desk Attendant** January 2021 to August 2022

As a desk attendant I was responsible for assisting students, delivering mail, and creating community within the residence hall.

## COMPUTER SKILLS

*Languages & Software:*

Proficient in: Git, LaTeX, Java, Prolog, Racket

Experience with: AWS, Bash, C, C++, CSS, Clojure, Docker, Excel, Go, Google Sheets, HTML, MongoDB, Open Liberty, Python, Wikimedia

*Operating Systems:* Ubuntu, Windows

## EXTRA- CURRICULAR ACTIVITIES & CERTIFICA- TIONS

CITI Program Social & Behavioral Research - Basic Expires September 2026

DOD Mandatory Controlled Unclassified Information (CUI) Training June 2023

MAA Seaway Contributed Talk Presenter: *Studying Ontologies Using Mathematical Techniques* Fall 2023

Elected *Secretary*, Oswego Computer Science Association Fall 2023

Elected *Secretary*, Oswego Math Club Fall 2021 to Fall 2023

Elected *Student Member*, Oswego Math Dept. Program Committee Spring 2023