

# Chance R. Howarth

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## EDUCATION

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### University of Wisconsin-Madison

**Intended Degree:** Bachelor Of Science - Computer & Data Science

May 2025

**GPA:** 3.42/4.00

## EXPERIENCE

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### Kraken Dynamics

Madison, WI

*Software Developer*

*October 2023 - Present*

- Developed a website using HTML and Python to showcase products.
- Designed algorithms to maximize efficiency to the constraints of our software.
- Implemented a variety of software to hardware connections through cloud devices.

### Westen Heating and Cooling

Elkhorn, WI

*Personal Assistant*

*May 2022 - June 2022*

- Assisted in creating data structures to analyze customer trends and patterns.
- Managed the programming of automated invoices and billing practices.
- Planned contract dates and meetings into calendars used by company employees.

### Delavan Lake Sanitary District

Delevan, WI

*Aquatic Operations Manager*

*April 2022 - January 2023*

- Organized with 3 city/town committees to uphold rules and regulations of the lake.
- Collected data on invasive species and effect ways to dampen their effects

## PERSONAL PROJECTS

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### Flight Router (Java)

- This project is a full-stack implementation that helps users find the shortest path between two airports through the flight information found online. It uses Dijkstra's algorithm to find the shortest path between the two selected airports.

### Movie Recommender (Java)

- This project is a full-stack implementation that takes a user input of two durations in minutes and returns all movies from this link are inside the given two durations. It uses a red-black BST to store the CSV values for duration in the tree to calculate its results.

### Cache Simulator (C)

- Designed and implemented a cache simulator in C, capable of interpreting Valgrind memory traces, and accurately tracking cache hits, misses, and evictions. Incorporated a Least Recently Used (LRU) replacement policy to manage cache sets and lines, facilitating dynamic memory handling. The tool provides insightful cache performance metrics, essential for optimizing and understanding memory usage in computing systems.

## RELEVANT COURSEWORK

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- CS 400 - Java Programming III
- CS 320 – Data Science Programming II
- ECE 354 – Machine Oriented Programming
- CS 539 – Intro to Artificial Neural Networks

## LINKS

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- GitHub: [github.com/chancehowarth33](https://github.com/chancehowarth33)
- LinkedIn: [linkedin.com/in/chance-howarth/](https://www.linkedin.com/in/chance-howarth/)