# Braden Dean

deanbraden333@gmail.com | (847) 531-3455 | 45W860 Plank Rd, Hampshire IL

#### Education

# **University of Illinois Urbana-Champaign**

Bachelor of Science in Computer Science

Bachelor of Science in Mathematics

#### **Related Coursework:**

Algorithms
Graph Theory
Combinatorics
Abstract Algebra
Database Systems
System Programming
Data Structures
Computer Architecture
Machine Learning
Numerical Methods
Complex Variables
Differential Geometry

#### Work Experience

# Kohl's - Operations Associate

Mar 2023 – Dec 2023

**Expected May 2025** 

GPA: 3.74/4.00

- Worked in a team to unload freight quickly and reliably
- Ensured efficient operation of the store while providing friendly customer service

# **University of Illinois** – *Undergraduate Research Assistant*

Aug 2021 - May 2022

- Sought approval to bring a microreactor onto campus by writing an environmental report
- Collected the required information for approval and ensured they met regulations

# Research Experience and Projects

# **Paintability of Multipartite Graphs**

Jan 2024 - Present

- Discovered new results, both computational and theoretical, related to graph coloring
- Used graph theory and algorithms to develop code that found new results
- Worked in a team to write a detailed report on our findings, methods, and new ideas

## **Marr Freight Management**

Jan 2024 - May 2024

- Designed an application allowing companies to manage freight shipments
- Utilized databases to connect companies, drivers, and shipments, streamlining logistics
- Created a user interface that was intuitive and responsive, ensuring a positive user experience

# **System Programming Networking Project**

Nov 2024 - Dec 2024

- Developed a Linux-based server and client which communicated over a network
- Implemented features for management of a filesystem, such as uploading, downloading, and modification
- Ensured the integrity of data was properly managed, with no corruption of files

## **Activities and Leadership**

## **Illinois Mathematics Lab Outreach** – *President*

Aug 2021 - Present

- Engages in hands-on activities with local students to get kids excited about math
- Volunteers at local schools and organizes visits to community events
- Trains new members and develops new activities

## Technical Skills

Programming Languages: Java, C, C++, Python, JavaScript, HTML, CSS, MySQL, Verilog, OCaml

Tools/Applications: Git, Visual Studio Code, AutoCAD, Microsoft Office