# Seth Bayle

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#### **EDUCATION**

University of Michigan

Ann Arbor, MI

BS, Computer Science

May 2024

 Relevant Coursework: Computer Game Design and Development, Data Structures and Algorithms, Intro to Computer Organization, Foundations of Computer Science, Programming and Intro to Data Structures

#### **EXPERIENCE**

# University of Michigan Esports

Sep 2019 - June 2023

League of Legends Varsity Captain

Ann Arbor, MI

- Led a competitive esports team, demonstrating strong leadership skills in strategizing, coordinating, and motivating teammates to achieve goals.
- Fostered a collaborative team environment by facilitating open discussions, sharing insights, and valuing input, contributing to a cohesive team dynamic and enhanced performance.
- Thrived in rapidly changing game scenarios, adapting strategies to counter opponents and secure wins.
- Conducted post-game analysis to identify areas for improvement and refine future strategies.

Walmart April 2019 - Sep 2019

Cashier

Whitehall, MI

- Provided friendly and helpful assistance to customers, addressing inquiries and ensuring a positive experience.
- Performed precise and efficient payment processing, maintaining transaction accuracy

# PROJECTS (C++)

### **Donut Delivery**

• Implemented Prim's and Kruskal's algorithms to find Minimum Spanning Trees (MST), and TSP heuristics to approximate the Traveling Salesperson Problems (TSP) to achieve an optimal donut delivery path

#### **Star Wars Battle Simulator**

 Using priority queues and implementing templated containers, inheritance and interface programming, and streaming algorithms, designed a program that could simulate a Star Wars battle

## 2D and 3D environments and puzzles

Developed a program that effectively utilized Graph search techniques, implementing both BFS and DFS
algorithms for route tracing, optimizing pathfinding capabilities for 2D and 3D environments and puzzles

#### Koscul

• A horde survival game built in Unity over 2 weeks and designed with a special physics mechanic to allow for player creativity and strategy variance.

#### **SKILLS & INTERESTS**

- Programming Languages:
  - o Advanced: C++
  - o Competent: C, C#, Python, ARM
  - o Exposure: Java, MATLAB, JavaScript, LUA
- Proficient in Adobe CC Applications, G Suite Applications, Windows, Unity, Linux, Git
- Interests: video games (competitive & casual), Korean (Intermediate), Adventure Time, guitar, music,
   Radiohead, rock climbing, art, comedy, traveling
- Ranked top 300 players in League Of Legends (Challenger Rank)