

# THOMAS PAYNE

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## EDUCATION

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**University of Michigan**  
*B.S.E Computer Science*

Ann Arbor, MI  
*Expected: April 2024*

## PROJECTS

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**Solar Car Race Simulator Architecture**  
*UM Solar Car Club*

Ann Arbor, MI  
*Sept 2022 - Dec 2022*

- Researched and created a 55-page detailed document of the simulator architecture which improved readability and accessibility for over 90+ students in the club.
- Collaborated with five team members to debug and refactor in C++ over 10+ bugs in the simulator architecture.
- Presented a comprehensive overview of the simulator architecture and potential improvements to the division leads and 20+ peers which was approved and adopted in the simulator.

**Database Query Language**  
*EECS 281*

Ann Arbor, MI  
*Nov 2022*

- Designed and programmed an SQL interface that allows users to create multiple tables, columns, and rows with search and retrieve functions for improved organization and efficiency.
- Developed using hash-tables and binary trees in C++, optimizing time and space complexities for storing and finding large amounts of data.
- Constructed an interface that handled both user errors and requests which improved the overall experience and accessibility for users.

## WORK EXPERIENCE

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**Amway**  
*Factory Worker*

Grand Rapids, MI  
*June 2021 - August 2022*

- Directed colleagues on code of conduct and day-to-day tasks helping them become comfortable and effective in the work environment.
- Assembled, packaged, shipped, and handled all Amway products so that they sustained their highest quality.
- Interacted and formed healthy relationships with co-workers to create a friendly and inviting atmosphere.

**Lion's Field Baseball Park**  
*Concessions Worker*

Grand Rapids, MI  
*Summer 2021*

- Managed all customer traffic and cash register operations which improved my organization and bookkeeping.
- Aided customers' questions and concerns by providing comprehensive solutions which refined my verbal communication skills.
- Handled food in a fast-paced environment using proper food and safety protocols for over 100+ customers a day.

## SKILLS

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### Programming Languages:

C/C++, HTML5, CSS, JavaScript, Git, Agile, Ubuntu, Microsoft Technologies, MATLAB, R

### Relevant Courses:

Data Structures and Algorithms, Foundations of Computer Science, Computer Organization, Discrete Math