

Jacob Williams

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EDUCATION

Southern Illinois University Edwardsville
Bachelor of Science in Computer Science
▪ Minor in Mathematical Studies

August 2019 – May 2023
Edwardsville, IL

PROJECTS

Checkers App – Python | April 2023

- Developed a comprehensive application integrating game mechanics, intelligent bot, and user interface
- Supports various play modes: 2-player matches, player vs. bot, or bot vs. bot competitions
- Provides the ability to create and import custom AI algorithms

Marvel Interaction Network – Python, Networkx, Gephi | March 2023

- Developed comprehensive network visualization of character interactions across first 30 MCU movies
- Utilized OpenAI's GPT 3.5 to parse movie transcripts and generate a structured csv file
- Conducted meticulous manual refinement to ensure precision and reliability
- Employed the Python library Networkx to transform the csv files into gml format for gephi

Mock MLB Database – MySQL | June 2022

- Developed MySQL database replicating the structure of the MLB, encompassing 14 different entities
- Established 8 interrelated tables within the database, capturing intricate relationships
- Populated with an extensive collection of thousands of entries, providing a realistic environment

Personal Website – PHP, HTML, JS, SQL | December 2020

- Developed a dynamic and engaging site consisting of 6 well designed pages, integrated with a database
 - Leveraged the power of cookies to provide a personalized user experience and effectively track users
 - Empowered users with the ability to perform essential database operations directly from the website
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EXPERIENCE

Stefanina's Restaurant

July 2017 – January 2023
St. Charles, MO

Kitchen Staff

- Assumed responsibility for the successful opening and closing operations
 - Demonstrated exceptional leadership skills by training and mentoring more than 20 new employees
 - Maintained impeccable cleanliness by diligently cleaning both the kitchen and dining room areas
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TECHNICAL SKILLS

- Python
- Git
- C++
- C
- C#
- SQL
- Java
- PHP
- Object-Oriented Programming
- HTML