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

Fantasy Football App - React, Python | September 2023

- Leveraged ESPN's fantasy football API to dynamically showcase detailed weekly breakdowns and more
- Adaptable for use across various ESPN leagues
- Implemented React for the interactive frontend and harnessed the power of Python for robust backend

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, 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

EXPERIENCE

Stefanina's Restaurant

Kitchen Staff

July 2017 – January 2023 St. Charles, MO

- 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

TECHNICAL SKILLS

- Python
- Git
- C++
- C
- C#
- SQL
- Java
- PHP
- JavaScript
- HTML
- Agile Methodologies