

Jacob Williams

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EDUCATION

Southern Illinois University Edwardsville
Bachelor of Science in Computer Science

- Minor in Mathematical Studies

Graduated May 2023
Edwardsville, IL

PROJECTS

Fantasy Football App – React, Python

- Called and stored ESPN’s fantasy football API data, using python, to reduce the load we were placing on the external api, minimizing the chance of being rate limited
- Designed and built comprehensive historical data features, using React, including leaderboards and player statistics

Checkers App – Python

- Developed a checkers game integrating game mechanics, intelligent bots, and a GUI (user interface)
- Supported various game modes: player vs. player, player vs. bot, or bot vs. bot
- Provided the ability to create and import custom AI algorithms, allowing the user to implement their own bot to compete against themselves or other bots

Marvel Interaction Network – Python, Gephi

- Developed a comprehensive network visualization of character interactions across first 30 MCU movies, to explore the idea of “Preferential Attachment” aka the idea that “the rich get richer”
- Utilized OpenAI’s ChatGPT to parse movie transcripts and generate a structured csv file
- Employed the Python library Networkx to transform the csv files into the GML format for Gephi

Mock MLB Database – MySQL

- Implemented, using MySQL, an MLB stats database storing player stats/awards, team win/loss stats, and other types of data
 - Established 8 interrelated tables within the database, capturing intricate relationships such as player to team, and award to player
 - Populated with an extensive collection of thousands of entries, providing a realistic environment
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EXPERIENCE

Busch Family Brewing and Distilling

Cook

November 2023 – Present
Defiance, MO

- Migrated recipe data from an excel file to an online restaurant recipe manager
- Managed opening and closing operations to ensure we have enough prepped for the day/week
- Trained over 20 new employees on opening/closing procedures

Stefanina’s Restaurant

Kitchen Staff

July 2017 – January 2023
St. Charles, MO

- Managed responsibility for opening and closing operations
 - Trained and mentored new employees
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TECHNICAL SKILLS

Languages: Python, C++, C, C#, SQL, Java, PHP, JavaScript, HTML

Frameworks: React, Flask

Tools: Git