David Mocianko

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EDUCATION

University of Illinois at Urbana - Champaign - Champaign, IL Expected December 2025

- **Major:** *B.S. in Computer Science and Statistics*
- **GPA:** 3.87/4.00
- **Relevant Courses:** Data Structures, Discrete Structures, Computer Systems, Statistics and Probability I & II, Data Science, Linear Algebra, Calculus series
- **Awards:** Dean's List Fall 2022

PROFESSIONAL AND LEADERSHIP EXPERIENCE

Undergraduate Course Associate / Assistant (CS 124) **Champaign, IL**

University of Illinois Department of Computer Science *January 2023 – December 2023*

- Held weekly discussion section of 50+ students to go over class material and provide support
- Held office hours to assist with homework, machine projects, quiz material, and Kotlin concepts
- Assisted students with creating app features in Android Studio as part of project assignment
- Mentored course assistants to help them transition into associate roles
- Transitioned to Associate role after 3 months as an assistant

Lifeguard **Morton Grove, IL**

Morton Grove park district *May 2023 – August 2023/May 2024 - August 2024*

- First-Aid/CPR/AED Certified, maintained safe environment, Team communication, leadership

PROJECTS

PNG Data Inserter/Extractor Microservice | C, Python, FLASK, REST API,

- Allows the user to insert and extract information files such as GIFs into PNGs.
- In Python, I then wrapped the C code into a web microservice
- Added routes that allow the user to easily insert and extract information into PNGs.

Interactive Weather Web Service | Python, FLASK, REST API

- Created a microservice that provides a report of the weather at the time of the next upcoming meeting of a course that the user can specify
- Uses the National Weather Service API to correctly find the weather at a location and time
- Created multiple routes to correctly call the API and implemented a cache system to prevent overusing the API with requests

Maze Maker and Solver | C++

- Creates a 2d maze of any desired height and width that is randomly generated using disjoint sets to determine proper placement of the walls and makes sure that the maze is solvable
- Solves by finding the best path using breadth first search and highlights the path in color

Python DataSet Analysis | Python, Pandas

- Took a csv dataset of past UFC fights, filtered the dataset, created an algorithm that would place bets based on the odds and return the results based on different strategies and concepts
- After simulations, I analyzed the expected outcomes and visualized the data into graphs

SKILLS

Programming Languages: C, C++, Python, Kotlin, Java, R, SQL,C#
Developer Tools: Visual Studio, Android Studio, Rstudio, Docker, Git