MAXIMUS LEWIS

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EDUCATION

Lewis University, Romeoville, IL Expected: May 2023
Major: Computer Science GPA: 3.8/4.0
Concentration: Software Engineering
Minor: Mathematics

TECHNICAL SKILLS

LANGUAGES: Python, Java, C, NetLogo, Go, SQL, JavaScript, Assembly
WEB: JavaScript, HTML, CSS, Node.js
HARDWARE/SYSTEMS: Windows, macOS, Android, iOS, ChromeOS, Unix, Ubuntu
APPLICATIONS: Microsoft Office, Microsoft Azure, Google Docs Editors, Git command line, GitHub, Visual Studio Code, IntelliJ, Android Studio, Eclipse, WinSCP, PuTTY

RELEVANT COURSEWORK

- Algorithms and Data Structures
- Object-Oriented Programming
- Software Engineering
- Database Systems
- Operating Systems
- Mobile Application Development
- Applied Programming Languages
- Web and Distributed Programming

PROJECTS

In Theaters

- Movie Information and Ticket Searching App
- Android app written in Java that allows users to see new movies that are in theaters
- Utilized the IMDb API to get information about the movies
- Allows users to view movies, view more information, and search the web for tickets

Math Tutor

- A web application that tutors users on addition, subtraction, division, and multiplication
- Written in HTML, CSS, and JavaScript
- Ten levels of questions, each getting progressively harder. Five correct questions to advance to the next level. Only allowed three wrong answers
- Application keeps track of current score and high score, which is stored as a cookie.

RESEARCH AND PRESENTATIONS

An Agent-Based Model of Environmental Transmission of *C. difficile* in Healthcare Settings

- Advisors: Dr. Brittany Stephenson, and Dr. Cara Sulyok
- An agent-based model written in NetLogo that simulates the environment of *C. difficile* infection within a hospital ward

- Model includes touch surfaces, healthcare workers, and patients within which the disease can be spread

Presentations

- Lewis, M. (2022, August). An Agent-Based Model of Environmental Transmission of *C. difficile* in Healthcare Settings. Undergraduate poster session presented at the Mathematical Association of America's 2022 MathFest in Philadelphia, PA.

WORK EXPERIENCE

Lewis University — Romeoville, IL
Engineering, Computational and Mathematical Sciences Tutor — August 2022 – Present

- Aided students in Computer Science and Mathematics
- Administered tests when needed
- Collaborated with professors and other tutors to better aid students

Lewis University — Romeoville, IL
Student Researcher — June 2022 – August 2022

- Conducted a literature search on the topic of *C. difficile*
- Compiled notes on past *C. difficile* mathematical models
- Developed a different agent-based model for the spread of *C. difficile*
- Collaborated with a research partner, and faculty mentors on the direction and specific implementation of certain aspects of the agent-based model

Will County School District 92 — Lockport, IL
Building Custodian — August 2018 – Present

- Ensure building cleanliness per district standards
- Operate machinery to achieve various cleaning tasks around the building and grounds
- Maintain school security by regulating entering/exiting public and staff
- Collaborate with staff to establish well running class and school events
- Perform assigned tasks effectively with minimal supervision

HONORS AND AWARDS

- The Janet L. Andersen Award for Undergraduate Research in Mathematical or Computational Biology (The Special Interest Group of the Mathematical Association of America on Mathematical and Computational Biology)
    - In recognition of "An Agent-Based Model of Environmental Transmission of *C. difficile* in Healthcare Settings."
- 2022 MAA MathFest Undergraduate Student Poster Session Outstanding Poster (The Mathematical Association of America)
    - In recognition of "An Agent-Based Model of Environmental Transmission of *C. difficile* in Healthcare Settings."
- Recipient, Schmidt Family Foundation Grant for academic achievement, 2020 - Present
- Dean's List, 6 semesters
    - In recognition of having a 3.5 GPA and above.