# **MAXIMUS LEWIS**

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## HIGHLIGHTS OF QUALIFICATIONS

- Proficiency in multiple modern programming languages such as Python, Java, Go, and JavaScript
- Experienced with both front-end and back-end development
- Proven leadership, interpersonal communication, and collaboration skills gained from working on a yearlong research project and through coursework/projects
- Familiar with Agile Scrum software development methodology

### **EDUCATION**

## **Bachelor of Science in Computer Science**

Lewis University, Romeoville, IL

Minor: Mathematics

Expected: May 2023 GPA: 3.8/4.0

### TECHNICAL SKILLS

LANGUAGES: JavaScript, Python, Java, Go, SQL, C, Assembly, NetLogo

WEB: JavaScript, React, HTML, CSS, Node.js, Express.js, Tailwind CSS, Bootstrap 5, Sass, Vue.js, Svelte, PHP, MongoDB,

Microsoft Azure, Google Firebase

HARDWARE/SYSTEMS: macOS, Windows, Android, iOS, ChromeOS, Unix, Ubuntu

APPLICATIONS: Visual Studio Code, macOS Terminal, Git, GitHub, IntelliJ, Android Studio, Eclipse, Microsoft Office, Google

Docs Editors, WinSCP, PuTTY

#### RELEVANT COURSEWORK

- Algorithms and Data Structures
- Object-Oriented Programming
- Software Engineering
- Database Systems
- Programming Languages

- Operating Systems
- Mobile Application Development
- Applied Programming Languages
- Web and Distributed Programming
- Software Systems Capstone Project

## **PROJECTS**

QuizMaster - https://quizmaster-c66a2.web.app/: Software Systems Capstone Project at Lewis University

- Developed a web application, as part of an Agile Scrum software development team, that allows users to take quizzes on a variety of different topics
- Written in React, and Tailwind CSS
- Using Google Firebase for hosting, authentication, Firestore NoSQL database, and serverless Google Cloud Functions

#### In Theaters

- Movie information and ticket searching mobile application
- Android app is 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

## RESEARCH AND PRESENTATIONS

## An Agent-Based Model of Environmental Transmission of Clostridioides 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
- The model includes touch surfaces, healthcare workers, and patients within which the infection 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.
- Lewis, M. Mahrat, L. (2022, November). An Agent-Based Model of Environmental Transmission of *Clostridioides difficile* in Healthcare Settings. Poster session presented at the Symposium on Biomathematics and Ecology Education and Research at Illinois State University.

## WORK EXPERIENCE

Lewis University

Romeoville, IL

Engineering, Computing, 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

## Will County School District 92

Building Custodian

Lockport, IL 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

Lewis University
Student Researcher

Romeoville, IL June 2022 – August 2022

• Conducted a literature search on the topic of *C. difficile* 

- Conducted a interactive search on the topic of C. atypicte
   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

#### 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 Clostridioides difficile in Healthcare Settings."
- 2022 MAA MathFest Undergraduate Student Poster Session Outstanding Poster (The Mathematical Association of America)
  - o In recognition of "An Agent-Based Model of Environmental Transmission of *Clostridioides difficile* in Healthcare Settings."
- Recipient, Schmidt Family Foundation Grant for academic achievement, 2020 Present
- Dean's List, 7 semesters
  - o In recognition of having a 3.5 GPA and above.