# **Olivia Guess**

6901 Montauk Ct • Columbia, Missouri 65203 • (573) 424-9301

guesso.olivia@gmail.com • www.linkedin.com/in/olivia-guess • https://oguess10.github.io/oliviaguess.tech/

#### **EDUCATION**

Washington University in St. Louis | Saint Louis, Missouri

Master of Science in Computer Science

McKelvey School of Engineering Department Chair's Master's Fellow

University of Missouri | Columbia, Missouri

Bachelor of Science in Computer Science, Minor in Mathematics

Graduated: May 2024

Anticipated Graduation: December 2025

GPA: 3.99/4.0

GPA: 4.0/4.0

#### RESEARCH EXPERIENCE

# Visual Interface and Behavior Exploration Lab | Washington University in St. Louis

August 2024-Present

Graduate Research Assistant

- Developed a visualization literacy assessment test using React to measure reading comprehension and interpretation of charts for 600+ residents of Ghana
- Evaluated and performed statistical analysis of the assessment in Python to determine test efficacy
- Currently developing regional visualization literacy assessment tests using React for 22 global regions and 6 languages

# Mizzou Motion Analysis Center | University of Missouri

July 2021-July 2024

Undergraduate Research Assistant

- Created a WinForms (C#) application with an intuitive user interface that combined several devices to simultaneously collect precise data for multiple concussion and mild cognitive impairment studies for over 200 participants
- Designed a database using MySQL and MATLAB to store processed data from studies for statistical analysis
- Built custom software to collect motor planning and execution data for hand kinematics using Arduino and C++

## PROFESSIONAL EXPERIENCE

## Garmin International, Inc. | Olathe, Kansas

May 2023-August 2023

Software Engineer Intern

- Implemented a user interface allowing users to view stock market information on smartwatches in C++
- Introduced red shift feature for smartwatches in C++ to assist users with night vision

# University of Missouri Division of IT | Columbia, Missouri

June 2022-August 2022

Student Assistant IT

Provided customer service through IT Help Desk and advised new students with installing Microsoft software for academic needs

#### TECHNICAL SKILLS

Languages: Python, C, C++, C#, HTML/CSS, JavaScript, Mathematica, Swift, SQL, Java, MATLAB

Frameworks & Tools: React, React Native, D3, Flask, WinForms, Unity, Git/GitHub, JIRA, Figma, Adobe Creative Suite

Embedded, Databases, Cloud, and Other: Arduino, Garmin Smartwatches, MySQL, AWS, Linux/Ubuntu

#### **PROJECTS**

Web & Mobile Apps: Built multiple applications using React, React Native, Flask, and Figma (portfolio website, credit card tracker, eco-friendly actions app)

Game Development: Designed a multiplayer time-management cooking game and an obstacle-course bee game in Unity

Systems & Databases: Implemented Python-based client/server chatroom; developed SQL database for movie ratings and reviews

## LEADERSHIP AND INVOLVEMENT

Upsilon Pi Epsilon Honors Society: President (2022-2023)-Led meetings, coordinated executive board

Alpa Omega Epsilon Professional and Social Sorority: Philanthropy Chair (2022-2023)-Organized volunteering events

Mizzou Club Dance: Co-Captain (2022-2024)—Led 15-member team for events

High School Dance Team Head Coach (2022-2023)—Directed and managed team for competitions and sporting events