

Lucia Weiner

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Education

University of Florida, Herbert Wertheim College of Engineering
Bachelor of Science in Industrial and Systems Engineering
Minor in Computer Science

GPA: 3.97/4.00
Expected Graduation: Dec 2027

Relevant Coursework: Data Structures and Algorithms, Introduction to Computer Organization, Computational Linear Algebra
Skills: Java, Python, C++, HTML/CSS, JavaScript, Arduino, Excel, PowerPoint

Job Experience

Robotics Academy Program Assistant

June 2023 - July 2023

University of Texas at Austin | Austin, TX

- Taught a C++ programming curriculum targeting high school students for the Department of Computer Science Robotics Academies
- Developed interactive robotics simulations in C++ using the Arduino IDE and orchestrated hands-on robotics programming workshops, increasing learning opportunities and accommodating diverse learning styles for 100 individuals

Project Experience

Financial Trading Strategy Machine Learning Project

January 2025 - Present

University of Florida | Gainesville, FL

- Developing a statistical financial trading algorithm by leveraging financial analysis, data preprocessing, and programming techniques to simulate and predict real-world market movements
- Applying statistical and machine learning techniques to analyze program performance, providing insights through back testing and comparison with existing trading strategies

Solar Gators Racing Team

August 2024 - January 2025

University of Florida | Gainesville, FL

- Developed and implemented algorithms to process SVG files of racetracks into curvature sampling for physics-based modeling to determine optimal speeds around a track to efficiently utilize car battery
- Applied computational geometry techniques to interpret and render complex curvature data

Post Grad Ponderin

November 2024 - December 2024

University of Florida | Gainesville, FL

- Designed and developed an interactive decision-support tool to identify optimal U.S. counties for users to reside in based on user-ranked criteria (e.g., poverty, education, income), utilizing advanced sorting algorithms and data parsing techniques
- Collaborated in a team environment using GitHub for version control, enhancing workflow efficiency and contributing to the implementation of features using SFML and SVG parsing

Minesweeper Game

April 2024

University of Florida | Gainesville, FL

- Developed a functional Minesweeper game using C++ and the SFML library, implementing core game mechanics and a user-friendly interface
- Utilized object-oriented programming principles to ensure maintainable code, improving the game's long-term functionality

Plant Carousel

November 2023 - December 2023

University of Florida | Gainesville, FL

- Conceptualized and developed a rotating plant carousel system using Arduino and C++ to ensure plants receive uniform sunlight exposure, promoting optimal plant growth and health
- Conducted iterative prototyping, troubleshooting hardware and software to achieve optimal performance

Involvement

Institute of Industrial & Systems Engineers Mentee

August 2024 - Present

IISE, University of Florida | Gainesville, FL

- Participating in the IISE mentorship program to enhance career development and foster student connection

Women in Computer Science and Engineering Club Mentor

August 2024 - Present

WiCSE, University of Florida | Gainesville, FL

- Serving as a mentor, offering academic and personal support for a smooth transition to university life