ADRIANA R. BOTTEGA

(561) 679-3383 · abottegam@outlook.com · www.linkedin.com/in/adrianabottega · github.com/abottegam

WORK EXPERIENCE

SMART CITY STUDENT INTERN   **JUNE 2024 – CURRENT**
CITY OF WINTER HAVEN, Technology Services Department   Winter Haven, Florida
- Assist in the research and development of smart city projects, including data analysis and project planning.
- Collaborate with interdisciplinary teams to design innovative solutions for municipal challenges, such as the use of predictive modeling, machine learning and artificial intelligence to improve city operations and IoT.
- Automated and facilitated the filing of 200+ bills to ensure the accurate representation achieving 100% satisfaction from finance.
- Developed city-scape simulation of Winter Haven and player-NPC interactions, integrated with ChatGPT API, on Unreal Engine 5.

TEACHING ASSISTANT FOR C   **MAY 2023 – AUGUST 2024**
FLORIDA POLYTECHNIC UNIVERSITY, Computer Science Department   Lakeland, Florida
- Assessed and provided feedback on 500+ homework assignments, resulting in a 16% improved student performance.
- Worked one-on-one with students achieving a 20% increased productivity.

ORIENTATION LEADER   **MAY 2023 – AUGUST 2024**
FLORIDA POLYTECHNIC UNIVERSITY   Lakeland, Florida
- Coordinated and lead virtual and in-person meetings with 500+ incoming students and promoted interaction and collaboration.

EDUCATION

BACHELOR'S DEGREE, Computer Engineering   **EXPECTED GRADUATION - SPRING 2025**
FLORIDA POLYTECHNIC UNIVERSITY | **Cumulative GPA: 3.96**   Lakeland, Florida
Relevant course work: Operating Systems Concepts, Digital Signal Processing, Data Structures and Algorithms, Computer Networks, Systems and Signals, Autonomous Robotic Systems, Digital Electronics, Control Theory, Object Oriented Programming, Circuits, Digital Logic Design.
President's List: Fall 2022, Spring 2023, Fall 2023, Spring 2024.

ASSOCIATE'S DEGREE, Associate Degree in Liberal Arts   **FALL 2020 - SUMMER 2022**
BROWARD COLLEGE | Cumulative GPA: 3.6   Broward County, Florida
President's List: Spring 2021, Summer 2021. Dean's List: Spring 2022, Summer 2022.

PROJECTS

JAVAFX FULL STACK GAME   **SPRING 2024**
FLORIDA POLYTECHNIC UNIVERSITY   Lakeland, Florida
Designed and developed a Java/JavaFX game from concept to completion, incorporating both front-end and back-end functionalities.

EMBEDDED SYSTEMS DESIGN AND DEVELOPMENT   **FALL 2023**
FLORIDA POLYTECHNIC UNIVERSITY   Lakeland, Florida
Designed, developed, and constructed an automated knitting machine consisting of a 3D printed, two-servo-controlled, robot arm and a DC motor-powered rotating loom. We directly manipulated the registers of the Atmega328 using embedded C to control the motors.

FPGA CIRCUIT DESIGN   **SPRING 2023**
FLORIDA POLYTECHNIC UNIVERSITY   Lakeland, Florida
Designed and executed a digital stopwatch using Boolean Expression to specify the circuit, implemented Verilog in Questa, and tested on an FPGA board. Utilized sequential logic by employing flip-flops, ripple carry adder, and clock divider.

SKILLS AND CERTIFICATIONS

Advanced: C, C++, Python, Java, Microsoft Tools: PowerPoint, Excel, Word.
Intermediate: Linux scripting language, JavaFX, MIPS assembly language, Microchip Studio IDE for embedded development, AVR assembly programming language, Questa software targeted for Intel® FPGAs devices, Verilog hardware description language (HDL), Unreal Engine 5 3D computer graphics game engine, HSpice device-level circuit simulator, Arduino open-source electronics platform.
Fluent in Spanish and English, intermediate Italian.

PCAP – Certified Associate Python Programmer, Python Institute   July 2024
PCEP – Certified Entry-level Python Programmer, Python Institute   August 2024
CAIE - Certified Artificial Intelligence Engineer, United States Artificial Intelligence Institute   In progress

LEADERSHIP AND EXTRACURRICULAR

SPHE VICE PRESIDENT OF TECHNOLOGY   **MAY 2023 – CURRENT**
FLORIDA POLYTECHNIC UNIVERSITY   Lakeland, Florida
Organize and supervise programming boot camps and technology-related events and activities.