HUU THANG LY

859-938-7389 | hly003@fiu.edu | bit.ly/huuthangly-portfolio | linkedin.com/in/huu-thang-ly

EDUCATION

Florida International University (FIU) | Miami, FL   Expected: Spring 2026
Bachelor of Science in Computer Engineering   GPA: 3.97/4.00
Relevant Courses: Embedded Computing, Programming Embedded System, Data Structures & Algorithms, Signals & Systems, Computer Design, Cloud Services, Linear Systems, Differential Equations, Circuits Analysis

WORK EXPERIENCE

Florida International University   Miami, FL
Undergraduate Research Assistant | Dr. Shekhar Bhansali's Lab   May 2024 - Present
- Implementing an innovative system combining Additive Manufacturing and Virtual Reality, leveraging digital twin technology and Unreal Engine to create a virtual lab for remote 3D printer control, enhancing accessibility and efficiency in 3D printing.
- Pursuing research on additive manufacturing with copper slurry and laser sintering to develop conductive traces for flexible electronics, sensors, and printed circuit boards.
- Investigating advanced 3D printing methods with PEEK to fabricate high-performance components tailored for aerospace and automotive industries.
- Engage closely with multidisciplinary teams, contributing to high-impact publications and presentations across fields.

Learning Assistant for Mathematics   August 2022 - July 2024
- Assisted students in succeeding in diverse math courses, including College Algebra, Precalculus, Calculus I, and Calculus II.
- Graded exams and provided detailed feedback to students, guiding each individual to strengthen understanding and performance.

PROJECTS

Butterfly Garden IoT | **INIT Build** | Hardware Developer   October 2024 - Present
- Advancing FIU's first butterfly garden alongside a team of 10 contributors and Green Campus Initiative, utilizing IoT and embedded systems for environmental conservation and monitoring visitor engagement.
- Engineered and configured Arduino Uno and ESP32 microcontrollers to interface with temperature, humidity, air quality, and gas sensors for real-time environmental assessment.
- Applied C++ with PlatformIO and Git for hardware-software integration and efficient code management.

OpenController | ShellHacks 2024 | Hardware Developer   September 2024
- Led a group of 3 students to create an extensible controller switching between gamepad and keyboard modes, with customizable key bindings for accessibility in multiple applications.
- Designed and integrated hardware components, including Arduino Micro, arcade buttons, and joystick, to enable user-friendly input options.
- Programmed functionality in C++ with PlatformIO for Arduino Micro, ensuring smooth operation and testing.

CatTrax - VR game | **INIT Build** | Backend Developer   February 2024 - April 2024
- Collaborated with 7 developers to build a VR game simulating real locomotive controls, allowing players to navigate a cat train between tracks to avoid obstacles.
- Developed core features for cat train, including track switching, collision detection, health system, timer mechanics, and particle effects to enhance gameplay experience.
- Leveraged Unity for game development, C# for programming train functionalities, and Git for version control and team coordination.

SKILLS

Programming: C/C++, Java, Python, C#, JavaScript, HTML, CSS, MIPS, MATLAB, VHDL
Software & Tools: Git, Unity, Unreal Engine, Azure, Fusion 360, Power BI, VS Code, Multisim, Vivado
Hardware & Systems: Analog/Digital Design, Microchip Explorer 8, Arduino, ESP32, FPGA Development
Certifications: Azure Fundamentals (AZ-900), CodePath Intro to Web Development