

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

SKILLS

Programming: C/C++, Java, Python, 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, FPGA Development, Microchip Explorer 8, Arduino, ESP32

Certifications: Azure Fundamentals (AZ-900), CodePath Intro to Web Development

WORK EXPERIENCE

Florida International University

Miami, FL

Undergraduate Research Assistant | Dr. Shekhar Bhansali's Lab

May 2024 - Present

- Developing an innovative system combining additive manufacturing and virtual reality, employing 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 advanced 3D printing with copper slurry and laser sintering to augment electrical conductivity and flexibility of sensors and printed circuit boards.
- Exploring plasma-induced enhancement of electronic properties in gold nanoparticles across various substrates to improve biosensor sensitivity.
- Engage closely with multidisciplinary teams, contributing to high-impact publications and presentations across fields.

Learning Assistant for Mathematics

August 2022 - July 2024

- Assisted more than 100 students in succeeding across 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 - December 2024

- 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.
- Implemented 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.