YunHao Dong

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EDUCATION

New York University, Tandon School of Engineering, Brooklyn, NY — Expected Graduation: May 2026
Bachelor of Science, Computer Engineering | GPA: 3.939 | Dean's List
Relevant Courses: Data Structures & Algorithms, Object Oriented Programming, Digital Logic, Circuits, Electronics 1

EXPERIENCE

NYU Tandon Media Services, *Student Assistant,* Brooklyn, NY — Sept 2023 - Present
- Provided active audiovisual support and troubleshoot tech equipments for 10+ spaces in NYU Tandon daily
- Attended biweekly workshops for training on more advanced AV equipment set up for large scale events

NYU Undergraduate Summer Research Program, *Student Researcher,* Brooklyn, NY — June 2023 - Aug 2023
- Integrated game scenes, C# scripts for game objects, and Python computer vision to track hand movements across webcam with 95% accuracy in Unity
- Designed a wristband PCB with sensors to gather tendon data from hand gestures & decreased PCB prototype size by 40%
- Collaborated with 4 student researchers to develop a frame for stabilize data collection using Ultraleap Camera

NYU Robotics Design Team, Brooklyn, NY

Systems Engineer — Jan 2024 - Present
- Developed embedded code for controlling robot in manual & autonomous operations in NASA's Lunabotics Competition
- Implemented I2C communication in Linux on NVIDIA Jetson with Teensy to reduce communication latency by 30%
- Communicated with 4 subsystems leads in weekly meetings to coordinate and strategize design implementation, constraints and intersystem integration, increasing operational efficiency by 20%
- Won first place in University-wide research exhibition for the Vertically Integrated Projects Category among 30+ projects

Electrical Team Member — Sep 2022 - Jan 2024
- Tested and programmed Brushless DC motors, hall effect, rotary encoder, and load cell sensors for data acquisition
- Prepared and presented STEM outreach lessons regarding Arduino and Python to local middle schools

Doris Dev, *Engineer Intern,* Brooklyn, NY — June 2022 - Aug 2022
- Collaborated with design engineers to prototype CAD models of consumer products using OnShape
- Tested 20+ consumer products to outline market standards and brainstorm better designs elements for market competition

PROJECTS

DataPulse — April 2024 - June 2024
- Developed a Python script that connects to an Arduino via Bluetooth, achieving real-time data collection from environmental sensors and logging the data into a CSV file with a 95% success rate
- Programmed Arduino Nano 33 BLE to advertise services and transmit sensor data through Bluetooth reliably
- Automated analysis of CSV files with python, using Matplotlib to produce line plot visualizations for stakeholders

SnapSpecs — Jan 2024 - April 2024
- Prototyped a detachable camera system to instantaneously capture and transfer photo under a $300 budget
- Interfaced Raspberry Pi for terminal commands and achieved 98% success rate in automated command execution
- Managed budget and coordinated 10+ meetings to implement design and testing for functionality with 2 team members
- Presented and demonstrated project at a showcase to over 100 students and faculty members of NYU entrepreneurship

Track N' Save — Nov 2022 - Nov 2022
- Collaborated with a team of 5 and designed a system for monitoring changes in movement pattern of keystone species
- Researched appropriate sensors and transmitters to indicate early stages of deforestation and notify local authorities
- Won second place from a pool of more than 100 participants around the world

SKILLS

- Languages: Python, C++, C#, HTML, CSS
- Systems Engineering, Embedded System, Linux, Hardware Design, OnShape, Altium, Unity