

THANH PHAM

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EDUCATION

Bachelor Degree: University of Houston, Houston, Texas

Expected Graduation: May 2026

- Major: Computer Engineering, GPA: 3.5
- Related Coursework: Programming and Data Structures (C++) | Programming for Engineers | Circuits I

TECHNICAL SKILLS

Programming Language: C++ (Advanced) | C (Intermediate) | Python (Novice)

Software: Fusion 360 | Siemens NX | Microsoft Office | Arduino IDE | Visual Studio | Eclipse | GitHub | Octoprint

Skills: Component Design | Performance Testing & Analysis | Software Development | Electric Design | Time Management

EXPERIENCES

NASA L'SPACE Mission Concept Academy

May 2024 – Present

- Obtained CAD designing experience with Siemens NX
- Primary Electrical Engineer and Secondary Computer Hardware Engineer in a 14-student team
- Produced a Mission Concept Review for a rover trip to explore the Lunar south pole

NASA Minority University Research and Education Project (MUREP)

January 2024 – April 2024

Innovation and Tech Transfer Idea Competition (MITTIC)

- Delivered a technical paper on the idea of using unmanned aerial vehicles to monitor and stop wildfires
- Designed a 3D model prototype using computer-aided design software Fusion 360
- Supported concept of operation and operating simulation of the unmanned aerial vehicle
- Presented at NASA Johnson Space Center as one of 11 finalist teams

Traffic lights System

December 2023 – January 2024

- Designed circuit to create a mini scale of a traffic management system using Arduino Uno 3 Microcontroller
- Implemented Arduino IDE and troubleshooted IoT platform to achieve best optimal design
- Reduced original time delay of each LED switching process by 1/1000 ratio

3D printer remote control system

September 2023 – January 2024

- Installed Raspberry Pi 4b as a 3D printer remote control using a Python based server
- Designed a system to controlled fan speed and integrated a camera with a Python-based server
- Achieved a reduction in power consumption and filament waste by up to 50%

Line Follower Robot

October 2023 – November 2023

- Assembled custom circuit interface using Arduino Uno 3 board and motor controller
- Operated robot at maximum motor speed (255) with a 0% failure rate on the track
- Developed a comprehensive guideline in GitHub outlining best practices and procedures for project development

LEADERSHIP & ACTIVITIES

Ping Pong Ball Final Project

September 2023 – December 2023

Project Manager

- Created a detailed Gantt chart to manage project timelines effectively with Microsoft Excel
- Conducted monthly technical report in Microsoft Words with presentation to demonstrate the team's progress
- Assisted in building a basic launcher out of recyclables and struck two targets with 62.5% accuracy
- Achieved the most cost-efficient design costing less than \$10