Michael Pham

7627 Brighton Knolls Ln | Richmond, TX 77407 | 713-885-6342 | phammichael1001@gmail.com

EDUCATION

Texas A&M University, College Station, Texas   August 2019 - December 2023
Bachelor of Science in Computer Engineering and Cybersecurity Minor
GPR: 3.19

RELATED COURSEWORK

Data Structures, Digital Systems Design, Computer Architecture and Design, Programming Studio, Operating Systems, Computer and Network Security, Microcomputer Systems, Software Reverse Engineering, Software Engineering

PROJECTS

AI Guided Coil Gun Capstone Project (Fall 2023)
- Worked on the software side of our AI Guided Coil Gun for Capstone Project
- Utilized cloud computing by hosting the machine learning model on Amazon EC2 GPU instance
- Created a program that used computer vision to identify a target based on user input for firing
- Implemented image segmentation through GroundingDINO library for accurate target acquisition
- Networked a flask connection for our workflow from UI, Amazon Instance, and Raspberry Pi
- Worked on hardware side of creation of coil gun through circuit design and review

GM-SAE Autodrive Challenge II / TAMU Undergraduate Research (Fall 2023)
- Joined Autodrive Challenge team as a computer engineer working with multiple teams
- Led meeting to assist other members in working on the same Docker Environment
- Implemented CI/CD through Jenkins and GitHub for the simulation Mathworks Challenge
- Worked on existing CAN code base to implement new features

Stronger Educator (Spring 2023)
- Collaborated with a customer and development team to create a web application
- Documented story points through Jira as well as created multiple technical documentations (code, end-user guide, installation guide) for successful customer handoff
- Utilized Heroku/Github with a pipeline for Continuous Integration/Continuous Development and ensured compliance through test driven development
- Delivered presentations to customer for feedback and iterative design

Smart Garden (Fall 2022)
- Combined multiple subsystems PI's in a team of 9 into one system using a Client/Server network
- Integrated a camera subsystem with ability to detect outside movement and conduct plant analysis
- Led development of camera subsystem through design process and organizing professor feedback
- Utilized computer vision OpenCV/PlantCV to detect movement and capture plant growth

Uniform Chat (Spring 2022)
- Developed a web application with a team using multiple chat APIs (Discord, GroupMe, Slack) to display messages from different applications into one place
- Coded application using django, python, and html
- Assembled a database using PostgreSQL and hosted website and database on Heroku

SKILLS

- Languages - C++/C, Python, Java, Ruby, HTML, CSS
- Databases- PostgreSQL/SQL
- Hardware - Raspberry PI, Multisim, Digilent Waveforms, LTSpice, Circuits
- Software Engineering - GitHub, Github Actions CI/CD, Jira, Heroku, Ghidra, Jenkins