

DUC TRONG NGUYEN

PROJECTS

Business solution - Interactive Card to Enhance Customer Reviews (Freelance project | May 2024 - Present)

- **Interactive NFC Card:** Developed using **HTML/CSS, JavaScript**, and Google Sheets **API, React.js** leading to a 40% increase in positive customer reviews by enhancing customer interaction and feedback management.
- **Machine Learning Integration:** Implemented algorithms to analyze feedback from NFC cards, improving response accuracy by 25% and providing actionable insights for local businesses.

AI and face recognition (Personal project | May 2024)

- **AI and Face Recognition System:** Developed using **Python** and **OpenCV**, achieving a 95% accuracy rate in identifying individuals. Enhanced security protocols for client operations, improving overall safety and operational efficiency.

Robot Arm - Embedded (Personal project | June 2024 - July 2024)

- **Robotic Arm Engineering:** Designed and built using an **Arduino** board, servos, and connectors. Programmed in **Python** and **C++**, improvement in movement accuracy and task performance.

NBA prediction game | Role: Back-end developer, Data analyst (Group project in-school | January 2024 - April 2024)

- **NBA Game Statistics Website:** Developed a website that tracks real-time NBA game statistics using **API** data and **Python**.
- **Machine Learning Integration:** Applied algorithms to historical NBA data, achieving 70% accuracy in game outcome predictions, significantly enhancing user engagement and platform reliability.

Watch Tower | Role: Web Back-End developer, UI-UX Designer (Group project in-school | January 2023 - April 2023)

- **Data Collection System:** Developed in **Rust** to gather user computer data. Integrated with a **Flask** backend to transmit data to a scalable **MySQL server**.
- **Website Development:** Designed and implemented a user-friendly website using **HTML, CSS**, and **PHP**, showcasing collected data with a responsive, modern interface.
- **Desktop Application:** Built a local access application in **Python** for comprehensive computer information retrieval, focusing on ease of use and performance.

SKILLS

Programming, scripting and markup language: JavaScript, SQL, HTML/CSS, Python, C#, C++, PHP, C, Kotlin, Assembly, Haskell.

Database: PostgreSQL, MySQL, MongoDB.

Cloud Platform: Microsoft Azure, AWS.

Web Frameworks: React, Node.js, jQuery, Next.js, Express, Bootstrap.

Embedded Technologies: Arduino, VHDL, Quartus Prime, FPGA, ESP32 (Node MCU), MQTT, Node-red, Hivemq, RTOS, IoT, UART, Blynk, FPGA.

Tools: Docker, Jira, PyQt, Git, Visual Studio Code, Sublime Text Microsoft Office, Jupiterlab, MATLAB, Discord, Slack.

Language: English, Vietnamese.

Soft Skills: Marketing, Solid Written And Verbal Communication Skills, Ability To Adapt And Learn, Problem solving.

EDUCATION

- B.Sc. Computer Science, University of Tennessee in Knoxville (GPA 3.91) 2022-2024
- A.Sc. Computer Science, Pellissippi State Community College 2020-2022
- Web Development Bootcamp, Embedded Systems Bootcamp: RTOS, IoT, AI, Vision and FPGA Udemy
- Marketing (University of Economics Ho Chi Minh City) 2016 -2019