# **HUNG NGUYEN**

Springfield, MO, 65802 · (417) 315-6108 · hung249@live.missouristate.edu

https://www.linkedin.com/in/hung-nguyen-2310a5220/ · O https://github.com/vbrfgd

# **EDUCATION**

#### **BACHELOR'S DEGREE OF COMPUTER SCIENCE**

AUGUST 2019 - MAY 2023

MISSOURI STATE UNIVERSITY - Springfield, MO

- GPA: 3.78/4.00
- International Leadership Scholarship (2019-2023).
- Dean's List for 8 consecutive semesters.
- Ranked in the top 91st percentile in the ETS Computer Science Major Field Test.

# **EXPERIENCE**

#### **Computer Science Lab Tutor**

October 2020 – May 2023

Missouri State University – Springfield, MO

- Help undergraduate students with their computer science problems in MSU Cheek 213 lab.
- Use communication and education skills to help students find their solutions to homework, labs, and problems.
- Create an atmosphere that encourages learning and exploring in the lab.

## **Internet Programming Grader**

February 2022 – December 2022

Missouri State University – Springfield, MO

- Grade homework assignment for CSC 365 Internet Programming course of the Spring 2022 semester.
- Check students' works to see if they are working as intended with required methods.
- Provide students with feedback on how to fix or improve their assignments.

#### **Undergraduate Research Assistant**

January 2021 – November 2021

Missouri State University - Springfield, MO

- Performed data analysis and preprocessing using Python and Microsoft Excel for the Computational Learning System Lab at Missouri State University.
- Applied various clustering methods to classify biomedical data.
- Researched various machine learning methods and papers to determine the most suitable method to categorize patients with Traumatic Brain Injury.

## **AWARD**

<u>A deep learning model to predict traumatic brain injury severity and outcome from MR images</u>

JANUARY 2021 - OCTOBER 2021

- Evaluation of a deep learning model based on a residual learning convolutional neural network that predicts TBI severity from MR images.
- Utilized **Python** with **pandas** and **skicit-learn** to preprocess raw data, along with testing the different clustering methods.
- Awarded "Best Paper Award" on Proc. IEEE CIBCB October 2021.

# **TECHNICAL SKILLS**

- Languages: C++, Python, C#, Kotlin, JavaScript, PHP.
- Tools: Android Studio, Unity, PostgreSQL, FlightSim.
- Libraries: TensorFlow, pandas, UMAP skicit-learn, Gym-JSBSim.
- Management: Trello, GitHub, Scrum management framework.

# **PROJECTS**

### Camera Re-Identification Using Bag Of Features

AUGUST 2021 - NOVEMBER 2021

- Using the <u>torchreid</u> library, the project attempts to re-identify people in a camera feed that has previously appeared in any other cameras in the same network.
- Utilized **Python** with **UMAP** to perform dimensionality reduction on the data extracted by the torchreid model and evaluate 4 different **clustering algorithms**: for the best method to categorize frames of different people.

# Autonomous Control of Fixed-wing Aircraft using Deep Reinforcement Learning

JANUARY 2022 - MAY 2022

- Stabilize the aircraft in Gym-JSBSim a reinforcement learning environments for the control of fixed-wing aircraft using the JSBSim flight dynamics model. The FlightGear Flight Simulator is used for testing.
- The reward formula in **Gym-JSBSim** was examined and modified using **Python** to reduce aircraft oscillation.

## **Duel – A Mobile First Person Fighting Game**

JANUARY 2023 - MAY 2023

- Created a first-person perspective fighting game with directional combat using parry and limb health system.
- Utilized the **Unity** engine and **C#** to create the game system and utilized **Pixel Studio** to create the sprites for the game.

#### Retiring Task – A Stalker G.A.M.M.A. Mod

MAY 2023 - PRESENT

- Developed a mod for the game Stalker G.A.M.M.A., adding a new type of radiant mission that gives reward based on the mission giver's equipment.
- Utilized X-Ray engine scripting as well as DLTX and DXML to add a new mission type with no
  conflict with the rest of the game as well as other mod.