HUNG NGUYEN

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

<https://www.linkedin.com/in/hung-nguyen-2310a5220/> ·  <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**

[***A deep learning model to predict traumatic brain injury severity and outcome from MR images***](https://ieeexplore.ieee.org/document/9562848)

*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 [*torchreid*](https://github.com/KaiyangZhou/deep-person-reid) 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.