Huy Gia Tong

Candidate for Bachelor of Science VNU-HCM University of Science, Vietnam

J +84-819000007 **■** tghuy212@clc.fitus.edu.vn • TGHuybu in Gia Huy Tong

EDUCATION

•VNU-HCM University of Science, Vietnam

Candidate for Bachelor of Science in Information Technology

Current GPA: 2.93/4.00

•Thuc hanh Su pham High School - Can Tho University, Vietnam

2018 - 21

2021 - 25

High School Diploma

Final Year Average Score: 8.4/10

PROJECTS

•Image Colour Compression Software

A software that uses k-means clustering to reduce the number of colours in an image, implemented using NumPy.

- Gained understandings of the basic structure of digital RGB images as well as NumPy calculations.
- Used unsupervised k-means clustering to group the RGB vectors and reduce the amount of colour present.
- Technology Used: Python, NumPy.
- GitHub Repository: TGHuybu/colour-compression

•Image Processing Software

A software that implements basic image processing operations.

- Used Python and NumPy to perform some basic image processing operations: brightness and contrast adjustment, flipping, grayscale and sepia conversion, blurring and sharpening, cropping and applying masks.
- Technology Used: Python, NumPy.
- GitHub Repository: TGHuybu/basic-image-processing

•"Bad Apple" ASCII Frame Converter

A simple script to convert individual frames of a video to ASCII characters.

- Used Python and NumPy to calculate average brightness of local pixels and map the result to a range of ASCII characters corresponding to each value.
- Experimented using Discord API to fetch each frame through Discord server channels.
- Technology Used: Python, NumPy, OpenCV, Discord API for Python.
- GitHub Repository: TGHuybu/bad-apple

EXPERIENCE

•Research Assistant $August\ 2022\ -\ Current$

The ELT/HARMONI Intermediate-mass Black Hole Project

Online

- Firsthand experience in reading and referencing academic papers.
- Assisted in galaxy sample selection and astronomical data acquisition for future observations.
- Provide occasional computing support for simulation and data analysis procedures.

SKILLS AND INTERESTS

Languages: Vietnamese (native), English (proficient).

Programming and Other Languages: Python, C++, HTML, CSS, LATEX.

Libraries: NumPy, Matplotlib.

Development Tools: Visual Studio Code, Git, GitHub.

Past Coursework: Data Structures & Algorithms, Operating System, Object Oriented Programming, Introduction to Database, Calculus 1 & 2, Linear Algebra, Probability and Statistics, Discrete Mathematics.

Ongoing Coursework: Introduction to Artificial Intelligence, Applied Mathematics and Statistics.

Areas of Interest: Data Science, Machine Learning, Image Processing, Astronomy, Computational Astrophysics.

Soft Skills: Problem Solving, Computational and Critical Thinking, Teamwork.