## **NGUYEN THAI HUY**

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#### ACADEMIC BACKGROUND

#### Singapore University of Technology and Design (SUTD)

Sep 2020 - Present

Bachelor of Engineering in Computer Science and Design (Honours)

- Focus track in Data Analytics with a minor in Operations Research & Engineering Systems
- Obtained Honours List for Freshmore and Sophomore term
- Recipient of University Student Award Achievement for active contributions to Academics and CCAs
- Expected graduation date: Apr 2024

Dallas College Jan 2019 – May 2020

Science Stream

- CGPA: 4.0/4.0
- Dean's List for all semesters (Top 3% of cohort for academic excellence)

#### WORK EXPERIENCE

#### Fragmented Mind (Unity Game Project)

Dec 2022 – June 2023

Game Developer

- Developed a first-person simulation that creates an authentic experience of someone living with schizophrenia, with the objective of raising awareness about this mental disorder
- Merged together thousands of assets to implement 4 unique game environments.
- Designed the first-person camera controls and the mouse interactions to manipulate scene objects in C#
- Established individual workflow pipelines and consultation for a 6-person team.

#### $Sing apore\ Institute\ of\ Manufacturing\ Technology (SIMTech) - A*STAR$

Sep 2022 – Jan 2023

Game Development Intern

- Developed a VR Gamification that recreates a self-guided interactive tour of Model Factory at SIMTech
- Implemented 5 unique level design, gameplay mechanic, as well as cross-platform VR Interaction System using C#
- Work on feature development and deployment of online services used in supporting game production pipeline
- Contributed to future efforts to document systems architecture and flows for general and technical audiences.

#### **Keywords Studio Singapore**

Sep 2018 – Jan 2022

QA Tester (Game Tester)

- Performed routine tests including smoke, divergence, full functionality test etc. by following test cases to ensure features worked as per designed using TestRail
- Applied exploratory and destructive testing to find potential bugs and exploits in the game, and filled bug reports in JIRA
- Effectively utilized Testing Tools to support QA team for daily regression checks (Consoles, PS4 Neighborhood, MemoQ)
- Identified, isolated, and documented bugs clearly and concisely, ensuring a clean bug base

#### ACADEMIC PROJECT

### Estimation of Galaxies Clusters through Bayesian Sampling & EM Algorithm

Feb 2023 – May 2023

- Applied Bayesian inference on a dataset of 820 galaxies in the Corona Borealis region and classify which clusters they belong to in R
- Utilized Bayesian posterior distributions formula to model the relationship between the observed data (galaxies) and the latent variables (clusters)
- Conducted Gibbs sampling based on the observed data and the posterior distributions in R, obtaining a Markov chain that allows for inference of latent variables and mixing proportions.
- Suggested an alternative approach using EM Algorithm, cutting down computational time by 20%

### Classification of Hate Speech using Machine Learning Model

June 2022 – Aug 2022

- Designed and trained a custom Machine Learning model using Scikit for a given dataset of 22,000 Twitter Posts, achieving an overall testing accuracy of ≈ 80% in classifying posts as either explicit hate speech, implicit hate speech or non-hate speech.
- Researched and tested multiple weight initializations, parameter values, as well as layer configurations that eventually improved the model's accuracy by ≈20%.
- Implemented autonomous features such as overfitting detection and auto-save in the training algorithm to enhance the model's performance and safeguard against unexpected stoppages during training.

### **Ascenda Hotel Booking System**

June 2022 – Aug 2022

- Developed multiple frontend web application components with frameworks such as React.js, React Hooks, Redux and implemented UI designs using Ant Design, Bootstrap and CSS Styling to enhance web applications
- Managed API endpoints and databases for Ascenda's web applications using Python, Django, and Django REST Framework
  Managed a team of 2 software engineers to run continuous code deployment using proper Git version-control system.

## ORGANISATIONAL AND COMMITTEE EXPERIENCE

# **Model United Nation Organization Committee**

Nov 2018 - March 2019

Director of Logistics

- Collaborated effectively with Marketing and Sponsorship Team to conduct the session with positive feedback from delegates.
- Responsible for inventory ledger and reconcile against in-house accounting system
- Managed day-to-day processing of accounts payable by Excel, ensuring all suppliers are paid within 30 days of invoice date

### **International Mathematic Olympiad**

Sep 2017 – Jan 2018

Team Captain

- Led a team of 10 to represent Vietnam in the International Mathematic Oylmpiad
- Coordinated with the Teaching Faculty in scheduling a suitable timetable for all 10 members, ensuring their full attendance
- Boosted the achievement rate by 30% from last year, with 2 members attaining the 1st prize

### SKILLS AND ADDITIONAL INFORMATION

- AI/Machine Learning: Scikit-Learn, PyTorch, TensorFlow
- Game Engines: Unity, Unreal Engine, Godot
- **Programming:** Python, SQL, C++, C#, Java, R, Matlab, HTML/CSS/JavaScript
- Languages: Fluent in written and spoken English and Vietnamese, familiar with conversational Japanese
- General: Proficient in Microsoft Office, with >5 years of experience in Microsoft Excel