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 Freshman and Sophomore term.
- Recipient of University Student Award Achievement for active contributions to Academics and CCAs
- Expected graduation date: Apr 2024

WORK EXPERIENCE

Singapore Institute of Manufacturing Technology (SIMTech) – A*STAR   Sep 2022 – Jan 2023
Game Development Intern
- Developed a VR Gamification in Unity that recreates a self-guided interactive tour of Model Factory at SIMTech
- Designed five distinct levels of the Model Factory, each with a unique puzzle mechanic to form an interconnected puzzle progression system in C#.
- Introduced element of randomness in puzzles using Procedural Generation, improving replayability
- 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 & PERSONAL PROJECT

Fragmented Mind (Unity Game Project)   Dec 2022 – June 2023
- Collaborated with artists, audio engineers, and scriptwriter to develop an immersive first-person simulation to authentically depict the experience of schizophrenia, aimed at promoting awareness of the disorder.
- Seamlessly integrated thousands of assets to construct four distinct level designs.
- Designed intuitive linear camera controls and the mouse interactions to manipulate scene objects.
- Established individual workflow pipelines and held weekly meetings for a 6-person team.

Classification of Hate Speech using Machine Learning Model   June 2022 – Aug 2022
- Designed and trained a custom Machine Learning model using PyTorch for a given dataset of 22,000 Twitter Posts, achieving an overall testing accuracy of $\approx 80\%$ 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 $\approx 20\%$.
- 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 two software engineers to run continuous code deployment using proper Git version-control system.

Python Implementation of Othello/Reversi   Oct 2020 – Dec 2020
- Successfully implemented the classic Othello game using Python, leveraging object-oriented programming (OOP) principles such as classes, and encapsulation to enable efficient turn-based gameplay.
- Demonstrated proficiency in game logic and algorithms by developing the core mechanics of Othello, including legal move validation and capturing opponent pieces.
- Employed Matplotlib library for visual representation of the game board, displaying the evolving state of the game.
- Utilized Python's Queue data structure to keep track of game moves and assist in Quality Assurance

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.

National Olympiad in Mathematic   Sep 2017 – Jan 2018
Team Captain
- Led a team of ten to participate in the National Olympiad in Mathematic in Vietnam
- Incorporated an individualized after-class session , helping all members consolidate their knowledge based on guidelines provided by the supervising teachers.
- Boosted the achievement rate by 30% from last year, with two members attaining the first prize.

SKILLS AND ADDITIONAL INFORMATION

- **Engines:** Unity, Unreal Engine, Godot
- **Programming:** C# , C++ , Python, Java, JavaScript, SQL, MATLAB, R
- **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. Highly interested in Machine Learning & Data Science