Nattapol CHANPAISIT | Mobile: 82874048 | Email: nattapol001@e.ntu.edu.sg
GitHub: https://github.com/NattapolChan LinkedIn: www.linkedin.com/in/nattapol-chan/

EDUCATION

Nanyang Technological University, Singapore Aug 2022 – Present
Bachelor of Engineering (Computer Engineering)
- Current CGPA: 4.81/5.00
- ASEAN Undergraduate Scholarship

ACADEMIC RESEARCH

Parallel Curves Detection Method based on Hough Transform Jul 2020 – Dec 2021
First Author
- Presented at 23rd TJCDCG3 (Thailand-Japan Conference on Discrete and Computational Geometry, Graphs, and Games
- Proposed a method to detect parallel curve of known equation and formulated mathematical proof behind the algorithm
- Performed simulation studies using both synthetic and real-world images

Attention-guided Deeply Supervised CNN in Stroke Segmentation May 2020 – Jun 2021
High School Graduation Project
- Enhanced performance of baseline Unet model from 0.46 to 0.55 with attention mechanism and deep supervision
- Increased the robustness of the model to high class imbalance dataset
- Won best poster award at Asia Pacific Conference of Young Scientists (APCYS) and best innovation award at the 5th KVIS International Science Fair

EXPERIENCE

Institute for Infocomm Research (I2R), A*STAR May 2023 – Present
NLP Research Intern
- Implemented various Positional Encoding techniques and investigated their effect on performance and length generalization in translation task
- Investigated the performance of different pretrained LLMs on code-switching and code-mixing

Machine Learning and Data Analytics Laboratory (MLDA@EEE) Nov 2022 – May 2023
Research Team Member
- Conducted an industrial research project on eye-gaze estimation algorithm with engineers from Black Sesame Technologies
- Implemented and did literature review on Unsupervised and Supervised SOTA approach
- Increased robustness and overall accuracy of the model with Knowledge Distillation (Born Again Neural Networks) and Similarity Feature Pruning

PROJECT

Guitar Tab Generator Jul 2021 – Oct 2021
- Build a webapp to generate a guitar tab from music file using short-time Fourier transform
- Integrated webapp with Web Audio API to output audio source according to notes played

HONOURS and AWARDS

Silver Medal – International Physics Olympiad 2022 July 2021

SKILLS

Programming Languages: Python, C, C++, C#, JavaScript, TypeScript
Machine Learning Framework: Pytorch, Keras, Tensorflow
Others: Git, GitHub, Linux, Docker, Unity3D, AWS