MAI CHI BAO



EDUCATION

2017 – Now Ho Chi Minh City University of Technology

Major: Electronics and Telecommunication

WORK EXPERIENCE

8/2020 – 3/2021 **VTNET – Viettel Telecom**

Engineering Intern (Radio Optimization Department)

- Researching on OFDM | Unlicensed IoT | NB IoT | 5G | 4G.
- Coding using Tableau to update the 4G parameters automatically
- Testing 5G and other technologies like RRU | BBU in BS

PROJECTS

8/2021

<u>Covid – 19 Classification through Cough sound</u>

- Python | Kaggle Notebook | Librosa | Pandas | Numpy | Tensorflow | Keras
- Audio features MFCC | Mel Frequency Spectrogram | ZCR | Energy can be analyzed on the time axis and then using CRNN – CTC loss to classify
- Using SMOTE to solve imbalanced data is 2% better than working with original data
- Final AUC $\approx 95\%$ with ANN model SMOTE and K Fold Cross Validation compared to 91% of using raw data

3/2021 Information Recognition on the University Test Paper

- o Python | GitHub | SciKit Learn | Matplotlib | OpenCV | VS Code
- o Image Pre-processing using OpenCV cuts the time it takes to use the EAST technique in half while maintaining the same level of accuracy
- o Generate multi digit numbers from MNIST dataset with the right Data Augmentation methods help increase the performance to 40%
- The combination of CRNN CTC Loss Model | Attention Layer | Lexicon Search improve the outcome significantly.
- Final accuracy of 97.14% on a class list of 245 students, inference time around 0.9 1s/image

Before Other projects and skills

- Vietnamese License Plates Recognition | Wall Following Car | LED Controlling through NodeMCU, MIT App
- o C++ | MATLAB | Tableau | KNN | MIT App | Arduino | NodeMCU

ACTIVITIES

2/2018 - 6/2020 Bach Khoa Music Club - Ho Chi Minh City University of Technology

Club President

- Planning and Organizing BK's Got Talent 2018 | Xem Xém OLD | Lσ show... of more than 100 persons each
- Over 2000 new fan page followers during my time in charge
- Sound setup | Event Host | Video Editor | Vocalist | Fanpage Admin

AWARDS/ ACHIEVEMENTS

- 2020 910 / 990 (TOEIC)
- 2019 Outstanding member in Spring Volunteer Campaign