Bui Thi Thanh Huyen

Machine Learning Researcher

Tokyo, Japan | buithanhhuyen.567@gmail.com | 070 4123 3435

https://www.linkedin.com/in/bui-thi-thanh-huyen/

https://btthuyen.github.io/BTTH.portfolio.io/

https://join.skype.com/invite/gXwlh8XzI8xR

https://github.com/BTTHuyen

EDUCATION

09/2019 – present
Japan

MS in Applied Informatics, *Hosei University*
GPA: 3.58/4
Thesis: Japanese Coins and Banknotes Recognition for Visually Impaired People

08/2014 – 06/2019
Vietnam

BS in Computer Science, *University of Information Technology*
GPA: 8.24/10
Undergraduate Thesis: Traffic Violation Detection

LANGUAGES

- English
- Vietnamese

SKILLS

Machine Learning | Deep Learning

Object Detection | Image Processing | Tensorflow

Keras | Teamwork | Problem Solving

PROJECTS

04/2021 – present

MOEMO FRAMEWORK: Engagement Detection,
Research Center for Computing and Multimedia Studies, Hosei University, Japan
My Roles:

- Researched, implemented a CNN to detect student's emotions.
- Detected and analyzed eyes' positions and their movements using OpenCV.
- Combined the results of Emotion Detection and Eye Detection to detect student's engagement.
- Combined Face Recognition into the framework to identify student ID and track their activities.
- Created, Imported the result to Database.
- Designed and implemented the function which can automatically generating and sending report to lecturer.

08/2019 – 09/2021

Japanese Coin and Banknote Detection,
Intelligent Media Processing Laboratory, Hosei University, Japan
My roles:

- Designed, collected, and processed the Japanese Coins and Banknotes.
- Implemented the Monocular Depth Prediction to effectively leverage the depth information of images.
- Processed, trained state-of-the-art Object Detection (YOLO nets) on both RGB images and Depth images to detect Japanese Coin/Banknote.
- Improved the accuracy of the system by using Ensemble Method. As the result, my work achieves 74.1% mAP (improve from 70% to 74.1%).

04/2019 – 06/2019

Face Recognition, Time Series Classification, *BeeSight Soft Company, Vietnam*
My Roles:

- Processed time series data using some machine learning methods: SVM, KNN algorithms.
- Implemented Face Detection with a small face.

09/2014 – 06/2019

Traffic sign detection, Traffic Violation Recognition,
Multimedia Communications Laboratory, University of Information Technology, Vietnam
My Roles:

- Collected and processed data.
- Implemented Haar Cascade to detect traffic signs.
- Implemented and evaluated SVM algorithm to classify violation or non-violation. The accuracy achieves 54.8% with VGG19 features.
- Implemented, evaluated YOLO and Faster RCNN models to detect the violating vehicles. This work achieves 92.21% mAP with Faster RCNN model.

PUBLICATIONS

Japanese Coins and Banknotes Recognition for Visually Impaired People
Huyen T. T. Bui, Man M. Ho, Xiao Peng, Jinjia Zhou (VIZWIZ 2020)

Briefing and Geovisualizing on International Practices of Learning Analytics in Higher Education
Hiroshi Ueda, Ho Tan Nguyen, **Huyen T. T. Bui**, Thuy Thi Thu Tran, Hisashi Hatakeyama, Mohammad Nehal Hasnine (IEEE ICALT 2021 - accepted)

Can Sakai Log Data Improve Learning Analytics? Findings from a Preliminary Survey
Mohammad Nehal Hasnine, Ho Tan Nguyen, **Huyen T. T. Bui** , Thuy Thi Thu Tran, Hisashi Hatakeyama, Hiroshi Ueda (accepted)

Students' Emotion Extraction and Visualization For Engagement Detection In Online Learning
Mohammad Nehal Hasnine, **Huyen T. T. Bui** , Ho Tan Nguyen, Thuy Thi Thu Tran, Gökhan Akçapınar , Hiroshi Ueda (KES2021 - accepted)