Nattarrud Charoennithi

Bachelor of Engineering (B.Eng) – Robotics and AI Major

nattarrud@gmail.com Tel: 090-714-7111 jaithehuman.github.io

About Me

Technical Skills Python, C/C++, JavaScript, MySQL, Git, Tensorflow, ROS
Languages Full Professional English, Native Thai
Other skills Autodesk Fusion 360, Adobe Xd, GX Works, MATLAB, Scilab, MVTec Halcon
Interests Machine Learning, Deep Learning, Computer Vision, Internet of Things

Education

King Mongkut's Institute of Technology Ladkrabang Ladkrabang, Bangkok (2019–Present)

- Bachelor of Engineering (Robotics and AI)
- Cumulative GPA: 3.60
- Relevant Course: AI Technology, Computer Vision, Programming, Robotics.

Assumption College Bangrak, Bangkok (2013–2018)

- High-school Diploma: Science and Mathematics
- Competition: Won first place in JA Company Program 2017

Competitions and Projects

MeSave (July 2021- Present)

- Built an energy monitoring system with artificial intelligence to predict electricity costs and detect anomaly in electrical appliances to help households save energy.
- Selected few of 200 innovations in a startup competition where the project compete against other startups from all over Thailand.
- Developed the prototype and software with a team of highly skilled undergraduate students

Hand Activity Model (Jan 2021 - Apr 2021)

- Trained a CNN model to track hand activity to detect and reduce human errors while assembling product.
- Wrote a python program to record and track hand movement in real time using webcams.
- Applied both program and trained model simultaneously to detect incorrect steps taken in product assembly line.

Rice Measuring System (April 2021)

- Wrote an python program to detect the number of rice and their characteristics from images to increase agricultural productivity.
- Built a rice shaker with on an Arduino micro-controller with servos to work with the algorithm.
- Used mathematical function and python libraries to extract and calculate the sizes of rice from images with high accuracy results.

Pills Classification (Oct 2021 - Present)

- Created a pill classification program to help people identify its' description without seeking a pharmacist.
- Classified 10 common household medicines using custom trained CNN model with high F1 score.

Behavioral Cloning (Nov 2021)

- Implemented a deep learning model to create a self-driving car in a Unity simulator.
- Configured the model hyper-parameters for best training results.
- Successfully created a self-driving car that can run on tracks indefinitely.