BENCHAPHORN CHANPRASERTKUL

PERSONAL INFORMATION

Email benchaphorn234@gmail.com

Tel 0937216183

Facebook Benchaphorn Chanprasertkul

Linked in www.linkedin.com/in/benchaphorn

GitHub https://github.com/SuuGarr

Education

2020 - 2024

King Mongkut's University of Technology Thonburi Bachelor of Engineering Program in Mechatronics Engineering

- **GPAX** : 3.55
- **Received a long-term scholarship** for further study and research until completing a Bachelor's degree from Junior Science Talent Project (JSTP-SCB) by National Science and Technology Development Agency(NSTDA)

2017 - 2020

Princess Chulabhorn Science High School Satun Mathematics - Science

- **GPAX** : 3.71
- **Participated in the 21st National Software Contest(NSC 2019)** for domestically by NSTDA

Category: Education Media Programs

Student Exchange

- **(2019) Was a student Science and Technology Exchange in Japan (Jenesys Program)** by Japan's government
- **(2018) Was a student Education and cultural Exchange at the Alam Shah Science Secondary School, Malaysia**

Internship Experience

European Organization for Nuclear Research, CERN — **Geneva, Switzerland**

DepOps - CERN Summer Student 2024 — June - Aug 2024

Responsible: Testing Infrastructure with GitHub Action.

- Testing Infrastructure with GitHub Action, Modify the structure , I optimized our approach by parallelizing the execution of test without having to rebuild the Docker image in every run. The Docker image we build contains all necessary dependencies, GPU drivers (if applicable), and the Xsuite packages in the versions we need to test. So I build Docker images once on a single machine and distribute these artifacts to other machines for testing.
- **Computer language**: Python
- **Tools :** Docker, GitHub Action, GitHub Artifact
- **GitHub :** https://github.com/SuuGarr/xsuite

MyOrder company — **Remote, Thailand**

Full stack developer — June - July 2023

Responsible: Developed web applications.

Developed web application, About Backend system for managing a complete online store.It will be developing the feature system of the online store management system in monitoring the number of seller orders.

- **Computer language**: Javascript, Typescript, CSS, HTML
- **Framework:** Angular framework, NestJs, NodeJs
- **Database:** MongoDB (No SQL Database)
- **Tools :** Docker , sonarqube , Git

The National Electronics and Computer Technology Center (NECTEC) — **Bangkok, Thailand**

Full stack developer — June - July 2022

Responsible: Developed web applications.

the first project. It will be developing the Line chatbot system for face authentication by developing the part of the User interface that has registration function Geolocation from GPS Accessing the User's Camera to take pictures of faces by creating a database to store username, password, User ID, IP address, location, face photo. Then the data will be sent to the line chatbot and connected to the research team's back-end platform to process facial authentication. After that, use the data to analyzed using AI that the user is in the specified place. and a photo of the face that matches the registration or not The second project, developing the detection of face spoofing with human behavior. By development of the User interface on the Website defines the usage of human behavior., then records the VDO and sends the file to be processed on the Face Behavior Detection Platform.

- **Computer language:** Javascript, CSS, HTML, Python
- **Database**: MySQL

Certificate and Awards

Best Oral presentation: ISPC Conference 2024 organized by KMUTT (Thailand)

Best Dissertation Project: Chalit Industry Award 2024 (Thailand)

Project about: 'Predictive control of Aluminum weld bead using an infrared thermal imaging with Artificial Intelligence base method.' the objective of this study is to develop a machine learning model aimed at crack detection and prediction of optimal welding parameters for aluminum material welding within the Gas Tungsten Arc Welding (GTAW) process. Using an infrared thermal camera for image acquisition, data collection, and subsequent analysis, the study aims to enhance production quality and reduce welding defects The experiment was operated using shielded gas tungsten arc welding on aluminum specimens, advantaging principles of Image Processing, and an Object Detection model (YoloV8) for crack detection on the weld bead. .

Computer language: JavaScript, CSS, HTML, Python, Machine Learning
Framework: Flask

Second runner-up Oral presentation: Delta Cup 2023 organized by Delta Electronics (Thailand)

Project about: Analyze the machinery damage to reduce energy consumption, this is the project that categorizes the type of damage for machinery breakdown e.g., Misalignment occurs when the motor drive shaft is not in correct alignment with the load, Bearing wear from a heavier load than designed for, to Reduce energy consumption and Reduce the damaged workpiece cost of production. In this project, we use vibration and temperature sensor for measuring, use PLC for receiving and sending data, use Cloud and software for processing, analysis, and storage of data, uses FFT analysis to convert a signal from time domain to frequency domain, and thereby provides frequency information about the signal. Use signal processing to classify damage to machines to predict damage. This may affect the efficiency of machinery, workpiece quality, or the use of more electricity. Finally, use the SCADA system and alarm show the analysis results. and damage caused to notify users to come and fix the problem immediately.

Silver medal in the contest "Thailand Research Expo 2022 " organized by NRCT (Thailand)

Project about : The 'Intelligent Prosthetic Arm', Intelligent Prosthetic Arm works by using 'Flex sensor' to receive bending signals from Arm impaired people's muscles around the Cubital Fossa or elbow pit, then use the bending value to control the Intelligent Prosthetic Arm. The Autodesk Inventor program has been used for planning and designing the prosthetic arm. After the developer had Mr.Chawakorn Thummameta (Arm impaired people) test the Intelligent Prosthetic Arm for assisting in daily life, the result was satisfying, the user could easily control the prosthetic arm and this innovation could help with the user's daily tasks.

Honorable mention "the 24th National Software Contest(NSC 2022) " organized by NSTDA (Thailand)

Project about: The 'Intelligent Prosthetic Arm

Certificate: Attended And Successfully Completed Web Application Penetration Testing (2023) by Mahidol University, depa Thailand

: Google Cloud Fundamentals: Core Infrastructure (2022) by TRAINOCATE Thailand

: MATLAB-self-paced training course (2021) by MathWork

Workshop : Mini Workshop GO Introduction Arise (2023) by INFINITAS

Skill

Computer language: JavaScript, Typescript, CSS, HTML, Python, Machine Learning, YAML

Framework: Angular framework, NestJs, NodeJs

Database: MongoDB (No SQL Database), MySQL

Tools: Docker, Sonarqube, Git, GitHub Action

Software: Solidworks, Autodesk, Matlab.

language: Chinese, English