PICHANON RATTANADILOK NA PHUKET

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WORK EXPERIENCE

Software Development Engineer, Brightree PTE LTD, Singapore   **July 2024 - Present**

- Developed and implemented data analysis and visualization tools for vessel operations, identified key areas for operational improvement and conducted presentation for clients and stakeholders, securing closer client relationship with some of the top marine operating companies in Singapore.
- Led the development and maintenance of software solutions for collecting and digitizing data from marine vessel systems, ensuring accuracy and reliability in harsh environments of open sea.
- Enhanced remote connection reliability of the between deployed devices and cloud service such as AWS cloud, resulting in improved uptime and data transmission efficiency.
- Spearheaded the planning of the company's new Energy Storage System (ESS) project, collaborating closely with a leading energy storage technology partner from China to seamlessly integrate the systems, driving significant advancements in energy efficiency and client satisfaction.
- Studied ML techniques to be used for preventive maintenance strategies of ESS based on factors such as state of health (SOH) or battery voltage to optimize system performance and longevity.

IoT Engineer Internship, Brightree PTE LTD, Singapore   **Jan 2024 - May 2024**

- Maintained and developed communication protocol between company's data monitoring devices and clients' marine vessels, ensuring seamless data exchange across various protocols.
Analyzed vessel travel routes and fuel consumption to identify trends and provide actionable insights for optimizing operational efficiency.

Data Engineering & Analytics Internship, PTT PLC, Thailand   **Jun 2023 - Jul 2023**

- Contributed to the Industrial Technology Division's new Energy Management System (EMS) service by providing consultation and technical support to clients, enhancing their energy management practices.
- Analyzed sensor data from multiple factory sites, delivering comprehensive reports and actionable recommendations to customers to support their decision-making processes.
- Conducted site surveys for new clients to prepare for sensor installations, including data extraction and machine evaluation, ensuring accurate and efficient setup of monitoring systems.

EDUCATION

National University of Singapore (NUS)   **Aug 2020 - Jun 2024**

- Bachelor of Engineering in Computer Engineering
- Specialisation in Internet of Things
- MOE Tuition Grant Recipient (with EP Eligibility Letter)

NOTABLE PROJECTS

Smart Door Lock System (CS3237 Introduction to Internet of Things)

- Developed a smart and secure door lock system utilizing advanced facial recognition technology to authenticate registered users and detect potential intruders based on computer vision algorithms, allowing accurate user identification and anomaly detection.
- Integrated the facial recognition system with a secured wireless transmission protocol (MQTTS) to communicate seamlessly between the frontend application and backend database.

SKILLS

- **Programming Language**:   Python, Java, C/C++, Kotlin
- **Machine Learning**:   Python's Scikit-Learn
- **Cloud Services**:   AWS S3 Cloud Storage