PARIMAN LORTHONGDAENG

Address: 68/27 Village No.4 Takut sub district, Mueang distric, Saraburi 18000
Contact: 097 - 278 - 9921
Email: Lorthongdaeng.prm@gmail.com

PROFILE

Graduated from the Faculty of Control System and Instrumentation Engineering at King Mongkut's University of Technology Thonburi (KMUTT). Always challenges myself and works hard to achieve my goals, striving to learn more about what I like. Able to work under pressure and am a fast learner. Enjoy communicating with colleagues and would like to apply my knowledge and skills to further develop myself and gain more experience. Therefore, Willing to learn new things and do my best if given the opportunity.

EDUCATION

King Mongkut's University of Technology Thonburi — Aug 2019 - Aug 2023

Bachelor of Engineering (Control system and Instrumentation Engineering)
GPAX: 2.71

WORK EXPERIENCE

LG Electronics (Thailand) Co. Ltd — March 2024 - Feb 2025

R&D Controller Engineer (Washing Machine)

- PCBA Quality Part Engineering.
- Supplier Audit for quality control.
- Internal Line for quality control.
- ESD Specialist.
- Supplier Line Quality improvement.

REPCO NEX Industrial Solutions (SCGC) — Jul 2022 - Oct 2022

Data Scientist (Intern)

- Apply descriptive analytic to analyze the impact of Input X to the output Y (quality).
- Apply basic change detection for individual parameters.
- Apply Machine Learning – Patter recognition.
- Develop model on Python programming.
- Develop dashboard on Microsoft Power BI.

ACADEMIC PROJECTS

Senior Project : Online HDPE Product Quality Assessment and Visualization

- Develop a Machine Learning model using auto-associative kernel regression and the CRISP-DM methodology to predict pipe quality, thereby reducing the time required to test pipe quality. Moreover, visualize the results on Power BI for the SCGC company.
- To early Fault detection pipe quality and visualize pipe quality real time.
- Performed Exploratory Data Analysis (EDA) to identify key factors affecting pipe quality.
- Preprocess data using MinMaxScaler for numerical features and manage outliers by deleting values beyond the upper boundary, replacing them with the boundary value.
- Develop dashboard on Microsoft Power BI
- Achieved 98% accuracy with the auto-associative kernel regression model, and the Power BI dashboard displays three pages for customer use.

Machine Learning Project : redict Seoul Bike Sharing Demand

forecast the demand for bike sharing in Seoul for 2017 using various regression model techniques.

- Performed Exploratory Data Analysis (EDA) to identify key factors affecting the data, and analyzed data relationships Using Heatmap and distributions using visualization to select input features for the model.
- Predicted the demand for bike sharing in Seoul for 2017 using various regression models: Linear Regression, Polynomial Regression, Decision Tree Regression, and RandomForest Regression, aiming to identify the model with the highest accuracy.
- Create a plot of predicted values compare with actual values in time series graph.
- Achieved R-Square : 82.96% and MSE : 18.04% by Linear Regression
- Achieved R-Square : 92.54% and MSE : 7.58% by Polynomial Regression
- Achieved R-Square : 82.97% and MSE : 17.31% by Decision Tree Regression
- Achieved R-Square : 91.58% and MSE : 8.56% by RandomForest Regression

Natural Language Processing (NLP) Project : Named Entity Recognition (NER) with CRF

- Built a NER model using Conditional Random Fields for entity extraction
- Prepared and processed datasets for NER tasks
- Engineered features such as word patterns, POS tags, and word shapes
- Evaluated model performance with F1 Macro metrics

CERTIFICATIONS

SQL (Structured Query Language) : CBTU MU, September,2024

Course Content:

- Retrieved and modified data using SQL
- Applied basic and advanced SQL commands
- Managed tables and established data relationships
- Used aggregate functions (INSERT, UPDATE, DELETE)
- Utilized subqueries and optimized query performance

Predictive AI :TUNEXT, October,2024

Course Content

- Performed exploratory data analysis (EDA) and data visualization
- Learned machine learning fundamentals (types, overfitting, underfitting, train-test split)
- Built data pipelines and handled missing and categorical data
- Analyzed time series (patterns, stationarity)
- Evaluated models using metrics (Confusion Matrix, AUC, MAE, MSE, RMSE, MAPE, R-squared)
- Explored ethical considerations and bias in AI
- Advanced topics in image processing and computer vision

Large Language Model (LLM): TUNEXT, November,2024

Course Content:

- Mastered prompt engineering basics and LLM generation parameters
- Worked with OpenAI's LLM API and FastAPI integration
- Applied advanced Langchain techniques and semantic search
- Developed LLM applications (tagging, schema design, sentiment analysis)
- Explored diffusion models (A1111, ControlNet, LoRA)

SKILLS

- **Programming Languages:** C, Python, SQL
- **Web Development:** HTML, CSS, JavaScript
- **Libraries & Frameworks:** Node.js, Express, FastAPI, Flask, NumPy, Matplotlib, Seaborn, Scikit-Learn
- **LLM & NLP:** OpenAI API, LangChain, Named Entity Recognition (NER), Sentiment Analysis
- **Software & Tools:** Git, Docker, Power BI, MATLAB
- **Languages:** Thai(Native), English (TOEIC: 545)