

Kanangnut Siriphool (Cat)

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EDUCATION

Silpakorn University

Thailand

Bachelor of Bioprocess Engineering (B.Eng.)

May 2009 - Dec 2014

- Project “A Computer Program for Determining Parameters of Cell Growth Kinetic Equation”. This thesis developed a MATLAB and C program utilizing the Nelder-Mead method and API integration to optimize parameters.
- Relevant Coursework: Sustainability, Biopharmaceutical, Biotechnology, Biochemical, Biofuels, Bioproducts, Data mining and Analysis, Statistical Analysis, Decision theory, Strain selection, Food and Beverage

SKILLS

Programing Languages: Python, SQL, JavaScript, CSS, HTML, React

Enterprise Management: SAP ERP

Technical skill: Tableau, Power BI, Looker Studio, API, ETL/ELT, pandas, NumPy, Matplotlib, Tensorflow, Scikit-learn, Keras, Seaborn

Developer Tools: PyCharm, VS Code, Excel, MySQL Workbench, SSMS, pgAdmin4, Microsoft 365

Languages: Thai, English

WORK EXPERIENCE

STMicroelectronics Pet., Ltd. | *Leading semiconductor*

Singapore

Quality Control, Product Quality Inspection

Jun 2022 - Jun 2024

- Conducted rigorous quality control (QC) testing of products throughout mass production and during new prototype development, utilizing statistical analysis and data-driven methodologies to make informed decisions regarding the release or rejection of defective products.
- Leveraged the Advanced Networking Terminal Application to analyze and edit wafer maps for wafers categorized with server defects, employing data visualization techniques to assist in identifying root causes and communicating findings effectively to relevant departments.

INEOS Styrolution Co., Ltd. | *Leading global styrenics*

Thailand

QA&QC Engineer, Product Analytics

Nov 2018 - May 2022

- Create BoM and specification for new product. Announce to all concerns for respective documents maintaining.
- SAP superuser on QM and MM module.
- Managed quality issues, conducted investigations, tests, and qualitative analyses to confirm product performance. Summarized conditions under which off-grade products could be utilized, exploring potential actions such as resale strategies and options for reprocessing into new grades. Developed dashboards for presentation to Product Manager (PM), seeking approval for product release to customers or initiation of re-production for new grades.
 - Created new criteria to clear 30mt of off-grade, overstocked raw materials, resulting in cost savings of approximately €8.5K. Monitored results with no quality issues reported from customers.
 - Utilized statistical analysis of both structured product properties and unstructured data to enhance streak performance, extending the shutdown period of a SAN reactor from 1 month to 3 months. This improvement resulted in a 76% increase in product capacity, with a daily production value of approximately €496K.
 - Successfully optimized rubber properties, leveraging structured and unstructured data for Indian market. Product ready for competitive market penetration in India.
 - Employed statistical analysis to adapt product specifications. This proactive initiative resulted in a notable 23% enhancement in business performance.
- Deliver on KPI of customer retention and repeat purchase, Data storytelling and Visualization Daily. Monthly with the team co-working to implement. Go live selected solutions.
- Prepared the quality reports to monitor projects status, tracked project progress and remaining work in accordance with production process.
- Successfully collected and transformed data from multiple sources into visualizations, achieving 90% completion rate, enabling C-level executives to use this data for forecasting new models for the company and management review.
- Led the Document database project, overseeing the migration of documents from Lotus Notes IBM database to Microsoft365.
- Conducted training sessions and consultant on company database such as SAP (MM & QM module), LotusNote(IBM database), and Microsoft365 for new and current employee, enhancing their understanding and utilization of these tools.
- Developed a program to calculate Ammonium Nitrate (AN) content results within the Macro FTIR platform using OMNIC FTIR software. This initiative aimed to prevent shutdown situations, ensuring continuous operation and efficiency in analytical processes.

- Spearheaded the project to ensure regulatory compliance with EU food contact amendments and customer declarations of residual styrene in product Material Safety Data Sheets. Implemented Globally Harmonized System (GHS) labeling to ensure standardized across regions.

Tetra Pak Ltd. | World's leading food processing and packaging solutions

Thailand

Quality Engineer, *Product Analytics*

Jun 2017 - Oct 2018

- Manage the handling of raw materials and finished products, considering release, hold, or reject, to support various KPIs.
- Led investigations and analysis to address and resolve claims and customer complaints, both domestic and international. Conducted on-site investigations at customer sites and prepared detailed analysis reports, completed 8D reports, and generated summary reports within specified timeframes.
- Developed work instructions, one-point lessons, and supporting documentation to align with operational processes.
- Ensured compliance with WCM, ISO9001, ISO14001, OHSAS18001, ISO45001, BRC, and FDA requirements.
- Managed as the project manager for the development of new products, coordinating efforts between external and internal teams. Evaluated testing conditions, reviewed product specification requirements, maintained project timelines, and presented regular updates to stakeholders. Additionally, served as a new product data analyst, conducting qualitative research to improve product properties.
- Created a dashboard enabling product teams to monitor critical metrics such as consistency, funnel dropout rates, and deviations from product history. This tool empowered teams to swiftly identify areas for improvement and make data-driven decisions to optimize product performance.
- Collaboration with Key Account Manager and Technical Service for new product development or modification, and new customer.

YOKOHAMA Tires Manufacturing Co., Ltd. | Automotive

Thailand

Technical Claim Engineer, *Customer Claim Analytics*

Feb 2016 - Jun 2017

- Managed Technical Claims from overseas and OEM customers, focusing on improving and developing processes.
- Set investigation meetings to disseminate information to relevant sections.
- Tracked production lot flow for detecting production abnormalities.
- Generated Technical Quality Claim Sheets (TQIS), Dashboard and presentation with YRC Japan headquarters.
- Conducted thorough competitor benchmarking, particularly analyzing tire structure and properties within the market segment. Leveraged benchmarking insights to drive the development and refinement of our product line, ensuring it remains competitive and aligned with market standards.

KPN Sakaguchi Co., Ltd. | Automotive

Thailand

New Model Engineer, *Product Development*

May 2015 - Jan 2016

- Managed data analysis and interpretation for part new model development, focusing on Metal Stamping and Assembly of Seatbelt and Airbag components.
- Tracked tooling status and updated Tooling Progress Sheet, conducted performance tests on new model parts, and optimized drawings and jigs for production within specifications.
- Create and Executed Product Part Approval Process (PPAP)

PERSONAL PROJECTS

Portfolio Website - HTML / CSS / JavaScript | [GitHub Repo: https://11nq.com/R4E87](https://11nq.com/R4E87)

- Developed a responsive portfolio website using HTML, CSS, and JavaScript and Implemented interactive features and smooth transitions using JavaScript.

Top Thailand Youtubers Analysis 2024 - API / GCP / Python / SQL / DAX | [GitHub Repo: https://shorturl.at/Pb6PX](https://shorturl.at/Pb6PX)

- Utilized SQL for data cleaning, transformation, and quality testing to ensure accurate and reliable insights, including removing duplicates, checking data types, and creating SQL views.
- Conducted detailed analysis to provide actionable insights and recommendations for influencer marketing strategies, helping optimize marketing budgets and maximize ROI for targeted campaigns.

Music Store Database Analysis - SQL / DAX / Power BI / PostgreSQL / RDBMS | [GitHub Repo: https://shorturl.at/xbMTy](https://shorturl.at/xbMTy)

- Conducted an in-depth analysis of the Chinook music store database using PostgreSQL and Power BI, generating insights into sales, customer behavior, and genre/artist popularity.
- Crafted and executed advanced SQL queries to address key business questions, such as identifying top-selling artists, popular genres, and customer spending patterns, informing strategic marketing decisions.
- Developed dynamic Power BI dashboards with DAX measures to visualize trends and support data-driven decision-making, enhancing operational efficiency and business performance.

HR Analytics Absenteeism - SQL / Excel / Power BI | [GitHub Repo: https://11nq.com/kOk6g](https://11nq.com/kOk6g)

- Built robust database, performed analysis, and connected to Power BI for dashboard creation.
- Utilized Microsoft SQL Server Studio for database creation, applied data joins for information integration, and developed visualization dashboard for monitoring employee absenteeism.

Forecasting Olympic medal counts - Python / Jupyter Notebook / Machine Learning | [GitHub Repo: https://acesse.dev/uKUhh](https://acesse.dev/uKUhh)

- Led Python-based machine learning project predicting Olympic medal counts using historical data.
- Executed full project lifecycle, from hypothesis to model training, utilizing libraries pandas, seaborn, numpy, scikit-learn.

Credit Card Fraud Detection | Python / Machine Learning | [GitHub Repo: https://shorturl.at/nVGhX](https://shorturl.at/nVGhX)

- Developed a robust fraud detection model using credit card transaction data, employing machine learning algorithms such as KNN, Gradient Boosting, LightGBM, Logistic Regression, and Random Forest; achieved high accuracy and recall, particularly with LightGBM and Gradient Boosting models.
- Conducted comprehensive data preprocessing, feature engineering (e.g., transaction time, distance calculations), and exploratory data analysis (EDA) using pandas, numpy, and visualization tools; effectively managed imbalanced data and extracted actionable insights.

Sentiment Analysis with NLTK / Scipy / AutoTokenizer / NLP Models | [GitHub Repo: https://shorturl.at/ZUG7L](https://shorturl.at/ZUG7L)

- Conducted sentiment analysis on Amazon product reviews using VADER and RoBERTa models to compare performance, performing detailed exploratory data analysis and visualizing sentiment distribution across multiple rating categories.
- Implemented NLP techniques for tokenization, named entity recognition, and sentiment scoring, enhancing insights by integrating Hugging Face's transformer-based model for contextual sentiment analysis.

CERTIFICATIONS

- Certification of Measurement System Analysis for ISO/TS 16949:2009
- Certification of Techniques Analysis Problem 5 Why and 8D and 5Gen for engineer and supervisor
- Certification of Labor Law and HR Techniques for People Management
- Certification of Requirements BRC Global Standards Packaging and Packaging Materials
- Certification of BRC Global Standards Packaging and Packaging Materials Issue 5 Internal Audit
- Certification of Internal auditor for ISO9001, ISO14001, ISO50001 and OHSAS 18001
- Certification of International Online Academy on "International Economic Law", Thammasat University
- Certification of Influencer Course by PacRim
- Certification of The Production Part Approval Process (PPAP)
- Certification of Failure Mode and Effect Analysis (FMEA)
- Certification of Influencer Course by PacRim (2020)
- Certification of Techniques Analysis Problem (2018)
- Certification of International Online Academy on "International Economic Law" (2019)
- Certification of Failure Mode and Effect Analysis and Process capability analysis (2020)
- Certification of BRC Global Standards Packaging and Packaging Materials Issue 5 Internal Audit (2018)
- Certification of Internal auditor for ISO9001, ISO14001, ISO50001 and OHSAS 18001 (2022)
- Certification of Data Analytics: Part 1 Foundations (2023)
- Certification of Data Analytics: Part 2 Extending and Applying Core Knowledge (2023)
- Certification of Advanced NLP with Python for Machine Learning (2023)
- Certification of AI Accountability: Build Responsible and Transparent Systems (2023)
- Certification of Learning Amazon SageMaker (2023)
- Certification of Amazon Web Services Machine Learning Essential Training (2023)
- Certification of Power BI: Integrating AI and Machine Learning (2023)
- Certification of AI Algorithms for Gaming (2023)
- Certification of Machine Learning with Scikit-Learn (2023)
- Certification of Python Libraries for Data Science (2023)
- Certification of Build Advanced Charts in R (2023)
- Certification of Building and Deploying Deep Learning Applications with TensorFlow (2023)
- Certification of Deep Learning: Model Optimization and Tuning (2023)
- Certification of Machine Learning Foundations: Calculus (2023)
- Certification of TensorFlow: Neural Networks and Working with Tables (2023)
- Certification of TensorFlow: Working with NLP, Natural language processing (2023)
- Certification of PyTorch Essential Training: Deep Learning (2023)
- Certification of Transformers: Text Classification for NLP using BERT (2023)
- Certification of Data Science with Python (2024)
- Certification of Business Analytics with Excel (2024)
- Certification of Tableau Training (2024)
- Certification of Data and its relationship (2024)
- Certification of Software Engineer (2024)
- Certification of Frontend Developer (React) (2024)
- Certification of SQL (Advance) (2024)
- Certification of Python (Basic) (2024)
- Certification of Road to Data Engineer 3.0 (2024)