NATASYA KHOO

Manufacturing Engineer

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SUMMARY

Versatile engineer with extensive experience in Artifficial Intelligent, machine learning, manufacturing, software development, and data quality management, adept at transitioning products from prototype to full-scale production, managing engineering changes, and developing machine learning-enhanced workflows. Proven track record of collaborating with cross-functional teams to troubleshoot and resolve production issues, optimizing manufacturing processes. Proficient in a wide range of technical skills including Python, Java, SQL, and various machine learning frameworks, with a demonstrated ability to deliver high-quality results in dynamic and fast-paced environments.

WORK EXPERIENCE

Manufacturing Engineer

Keysight Technologies Malaysia

March 2023 – Current

- Supported the seamless transition of products and manufacturing processes from prototype to full-scale production, effectively managing their lifecycle to ensure operational efficiency and product quality.
- Managed the lifecycle of Engineering Change Orders (ECO) and Engineering Change Notices (ECN) from initiation to implementation, ensuring timely updates and compliance with industry standards.
- Processed ad-hoc requirements in Agile and Oracle systems to address urgent shipping needs, ensuring timely and accurate delivery of products to meet customer demands.
- Collaborated with cross-functional teams to troubleshoot and resolve production issues, optimizing manufacturing processes and enhancing overall productivity.

Software Engineer

SNS Network (M) Sdn Bhd

May 2022 – *March* 2023

- Participated in the system development and enhancement processes, including coding, programming, troubleshooting, system analysis, and comprehensive system testing.
- Prepared, maintained, and updated detailed system documentation encompassing data workflows, logical processes, and interfaces with other systems, ensuring seamless integration and functionality.
- Engaged in the training and integration of various machine learning models into a web application, enhancing its capabilities in prediction, forecasting, and regression across diverse business use cases.
- Developed machine learning-enhanced workflows to streamline processes within inventory, sales, HR, and
 other departments, generating accurate predictions for sales and product demand, and performing ABC
 classification using SKU information.

Data Quality Engineer Trainee (Outsourcing)

Petronas Digital Sdn.Bhd.

Nov 2021 - May 2022

- Collaborated with the data engineering team to design and implement ETL processes for extracting data from various sources, ensuring data integrity and accuracy.
- Transformed extracted data into a usable format that met project specifications, enhancing its accessibility and usability for analysis.
- Utilized SAP BODS (Business Objects Data Services) to facilitate efficient extraction, transformation, and loading (ETL) of data, optimizing the overall data processing workflow.
- Developed and executed ETL jobs that successfully loaded processed data into designated target databases or data warehouses, ensuring data availability for analysis and decision-making.

EDUCATION

Universiti Kebangsaan Malaysia (UKM)

Bachelor of Computer Science (Hons) Artificial Intelligence

Oct 2019 – Nov 2023

Perak Matriculation College

Malaysia Matriculation Programme

June 2018 – May 2019

PROJECT

Lyrics Based Emotion Classification

- Created an innovative project focused on emotion classification using a comprehensive dataset of Malay patriotic songs, which aimed to enhance the emotional impact and resonance of patriotic music.
- Leveraged the NRC Emotion Lexicon as a foundational tool, ensuring the accurate identification and classification of emotions within song lyrics, thus providing a robust basis for analysis.
- Utilized four distinct machine learning models to improve classification accuracy across eight classified emotions, and developed a dashboard application from the results.

Symptom Based Emotion Classification

- Facilitated a collaborative project between computer science and healthcare students, resulting in the successful creation of a user-friendly website designed for the pre-diagnosis of non-communicable diseases (NCDs).
- Completed the entire project within a month, encompassing all stages from model training to the deployment of the machine learning model onto the website, demonstrating efficiency and effective project management.
- Delivered a practical and accessible tool that enables users to identify potential health issues based on symptoms, thereby contributing to early detection and preventive healthcare measures.

Hotel Booking Website

- Developed a comprehensive Hotel Booking Website using the MERN stack, which harnessed the combined capabilities of MongoDB, Express.js, React.js, and Node.js, to create a robust and scalable application.
- Designed and implemented a user-friendly platform that offers seamless search, booking, and management of hotel reservations, ensuring an enhanced user experience and streamlined booking process.
- Delivered a solution that caters to both users and hotel operators, facilitating efficient management of bookings and enhancing the overall efficiency of hotel reservation systems.

EXTRACURRICULAR

Facilitator

Turtle Bot Simulation Workshop

- Collaborated with fellow facilitators to outline and develop the workshop structure, ensuring a comprehensive and engaging learning experience for participants.
- Guided and supervised a group of juniors, aged 7 to 13 years old, ensuring the successful execution of the workshop's objectives and fostering a supportive learning environment.
- Imparted a clear understanding and practical implementation of basic ROS commands using the Linux operating system, enabling participants to gain hands-on experience and build foundational skills in robotics.

SKILLS

- **Technical Skills:** Microft Office, SQL, Python, Java, HTML, CSS, JS, Power BI, Tableau, Tensorflow, scikit-learn, PyTorch, Keras
- Language: Mandarin (Native), Cantonese (Native), English (Advance), Malay (Advance)
- **Soft Skills:** Problem-solving, analytical, confident, articulate, professional speaking abilities, thrive in a team environment and work well with others, able to work independently in a fast-paced environment

REFERENCES

Available upon request