Ludhiya Rose Giji

Block 634 Choa Chu Kang Nth 6,#11-291 Singapore 680634
+65 94204876
ludhiyargiji1@gmail.com
https://www.linkedin.com/in/ludhiya-giji-0a521b22a/

SKILLS

- Python
- SQL
- Data Analytics
- Data Structures and Algorithms
- Big Data
- Power BI
- Microsoft Excel

EXPERIENCE

Micron Technology, Bendemeer - *Quality Technician Managed NAND (NVMQRA)*

Dec 2024 - PRESENT

- Coordinate Quality and Reliability (QRA) testing and manage data collection for failures generated during AQL sampling and reliability testing on automatic test equipment (ATE).
- Perform initial failure verification, benchtop and IV analysis to determine fail type (electrical or functional).
- Operate advanced test equipment including Mag5, Advantest, and Micromate for Managed NAND device evaluation.
- Generate detailed failure summaries in the database, including failure mode, IDD values, fail location bitmaps, failing registers, and pin information.
- Collaborate with QRA Engineering and Manufacturing teams to coordinate test batching, acquire equipment, and communicate results effectively.
- Track and manage MAM (Material Analysis Management) requests and maintain accurate engineering records.
- Apply strong organizational and communication skills to ensure testing quality and timely reporting.

Global Foundries, Woodlands Industrial Park - *Associate Engineer*

May 2022 - April 2024

- Optimized CVD process parameters, ensuring consistent film quality and contributing to higher yield rates.
- Implemented SPC techniques, enhancing process stability and reducing variability, leading to a measurable improvement in production consistency.
- Diagnosed and resolved process issues, reducing downtime by approximately 15%, which led to more efficient tool utilization
- Streamlined the handover process for lot disposition and tool/process-related inhibits, improving shift-to-shift communication and minimizing process delays.
- Analyzed process data to identify key trends, driving process optimizations that improved operational efficiency.
- Applied statistical process control (SPC) to analyze large datasets and reduce process variability.

MICRO 2000 Technology PTE LTD, Ubi - *Intern*

Mar 2021 - Jul 2021

- Delivered IT support services to staff and students, ensuring timely resolution of technical issues and minimizing disruptions to daily operations.
- Installed and configured software for users, improving system efficiency and enhancing user experience.
- Demonstrated users in utilization of IT services provided in the devices.
- Learned to manage time and completed assigned tasks by prioritizing the activities.
- Installed, upgrade, support and troubleshoot Windows 7, Windows 8.1, Windows 10 and Microsoft Office
- Dealing with hardware and application support queries and issues reported to the support desk and escalated to the Desktop Support Engineers.

EDUCATION

University of Portsmouth - *Bachelor of Science with Honours in Data Science and Analytics*

Dec 2023 - Aug 2025

Temasek Polytechnic - *Diploma in Electronics*

Apr 2019 - May 2022

PROJECTS

Phishing Website Detection using Machine Learning

Developed an intelligent phishing detection system to classify URLs as legitimate or malicious using supervised machine learning algorithms such as Random Forest, SVM, and XGBoost. Processed a dataset of 247,950 URLs with 41 lexical and domain features, achieving a ROC-AUC of 0.9929 and F1-score of 0.9653. Built a user-friendly desktop application with

PySide6 to provide real-time URL safety predictions, bridging advanced ML research with practical cybersecurity defense.

Database Design and Implementation for Marine Services Management

Developed an end-to-end database solution for Solent Marine Solutions (SMS), creating an Entity Relationship Diagram (ERD), defining primary and foreign keys, and implementing SQL queries for business insights. Enhanced data security by configuring roles and privileges, and optimized database performance through transaction analysis and indexing.

IoT-Based Home Environment Monitoring System

Developed an affordable IoT-based system using Arduino Uno, DHT11, and LDR sensors to monitor temperature, humidity, and light levels in real time. Integrated the ESP8266 Wi-Fi module to transmit data to the ThingSpeak cloud for visualization and remote monitoring. Implemented alert mechanisms using LEDs, buzzers, and LCD displays to notify users when thresholds were exceeded. The system demonstrated reliable performance and provided an efficient solution for maintaining safe and comfortable indoor environments through real-time data analytics.

Certification/Short Courses

- Databases and SQL for Data Science with Python by IBM from Coursera.
- Introduction to Technical Support by IBM from Coursera

References

References are available upon request.