Yengkong Vang Sayaovong

414-739-1246• Milwaukee, WI (Open to Relocation) • YSayaovong@gmail.com • https://linkedin.com/in/ysayaovong
https://github.com/YSayaovong • https://ysayaovong.github.io/Portfolio/index.html

Data Analysis

Experienced Mechanical Designer with nearly 5 years of expertise in optimizing workflows and collaborating with cross-functional teams. Currently completing a Data Engineer internship, applying skills in data analysis, pipeline development, and automation. Proficient in using tools like Python, SQL, and Excel for data-driven problem-solving. Pursuing a Bachelor's in IT to enhance analytical capabilities and build expertise in visualization tools like Tableau and Power BI. Committed to leveraging engineering and analytical experience to uncover insights and drive data-informed decision-making.

Career Highlights

Data Engineer Intern | Refonte Infini – Remote 11/2024 – Present

- Assisted in basic data cleaning and preprocessing tasks, ensuring data quality for preliminary analysis.
- Conducted exploratory data analysis (EDA) to identify general trends and patterns, gaining hands-on experience with Python and data visualization tools.
- Supported feature engineering and model development under supervision, contributing to the preparation of data for predictive modeling.
- Documented data processing steps in Jupyter Notebook to establish a reproducible workflow.

Mechanical Designer | Prolec-GE Waukesha – Waukesha, WI 10/2020 – Present

- **Design & Detailing:** Designed and detailed transformers and drafted nameplates using CREO 8.0, ensuring compliance with industry standards and high precision in all design aspects.
- **Quality Assurance:** Conducted comprehensive quality checks on transformer designs, identifying and rectifying issues to maintain stringent quality standards.
- **Process Improvement:** Led multiple process optimization initiatives, resulting in a 10% increase in design efficiency and a significant reduction in errors.
- **Code Debugging:** Debugged C++ code for design automation tools, improving the efficiency and accuracy of workflows and reducing time spent on repetitive tasks.
- **Training & Development:** Trained new hires, developing a structured training program that includes hands-on sessions and written guides to ensure new team members meet performance standards.
- **Project Management:** Created and managed an Excel-based project tracker, providing real-time insights into project progress, error rates, and completion timelines, facilitating data-driven decision-making.
- **Team Leadership:** Led team meetings to discuss ongoing projects, resolve design challenges, and align team members on objectives, fostering a collaborative environment.
- **Data-Driven Visualizations:** Developed automated visualizations to analyze error trends over time, utilizing line and pie charts in Excel to support quality control and continuous improvement efforts.
- **Documentation & Standardization:** Authored a comprehensive training manual and standardized procedures, enhancing team consistency and reducing onboarding time for new hires.

Education

B.S., Information Technology; Minor in Music | *Arizona State University* | 2021 – Present

Data Analyst Career Path | *Zero to Mastery* | 2024 – Present

Data Analyst in Python | *DataCamp* | 2024 – Present

A.S. in Mechanical Design Technology | *Milwaukee Area Technical College* | 2017 – 2021

Technical Proficiencies

Mechanical Design:	**Software:** CREO 8.0 – Skilled in 3D modeling, drafting, and detailing mechanical components, with extensive experience designing and modifying transformer parts and assemblies**.** **Quality Control:** Proficient in quality assurance practices, including conducting inspections, identifying design discrepancies, and implementing corrective actions. Process Improvement: Experienced in process optimization, including root cause analysis and iterative improvements, resulting in enhanced design efficiency and reduced error rates. **Project Tracking:** Skilled in using Excel for project tracking and documentation, creating dashboards to monitor progress, error rates, and timelines.
Programming & Automation:	**Python (Intermediate):** Three years of experience, with skills in data manipulation, scripting, and process automation, primarily applied to data analysis tasks. **C++ (Advanced Debugging):** Nearly five years of experience in debugging C++ code, used for enhancing design automation tools and improving workflow efficiency. **VBA for Excel:** Proficient in creating macros and automating tasks within Excel to streamline data handling, reporting, and project tracking, resulting in improved efficiency.
Data Analysis:	**Data Cleaning & Preprocessing:** Proficient in identifying and handling missing data, duplicates, and outliers to prepare datasets for analysis. **Data Visualization:** Experienced in creating clear, insightful charts and visualizations in Python and Excel to support reporting and presentations. **SQL (Entry-Level):** Knowledge of querying databases to retrieve and manipulate data, with a focus on foundational operations like SELECT, JOIN, and WHERE clauses.
Documentation & Reporting:	**Technical Documentation:** Skilled in creating detailed documentation for processes, design changes, and training materials to support team knowledge sharing and project consistency. **Reporting:** Experienced in preparing reports and presentations that communicate project metrics, quality improvements, and data-driven insights.

Projects

Predictive Analysis and Data Insights on the Titanic Dataset November 2024

Description: Conducted a comprehensive analysis of the Titanic dataset to uncover factors influencing passenger survival and developed a predictive model to estimate outcomes.

- **Data Preprocessing:** Addressed missing values, removed irrelevant columns, and prepared the dataset for analysis.
- **Exploratory Data Analysis (EDA):** Utilized Python libraries (Seaborn, Matplotlib) to visualize survival trends across variables such as class and age.
- **Feature Engineering:** Selected and prepared key features for optimal model training.
- **Machine Learning Model:** Developed a Random Forest Classifier in scikit-learn, evaluating performance with metrics including confusion matrix and classification report.

Key Skills: Python, Data Analysis, Machine Learning, Data Visualization, EDA, scikit-learn, pandas, Seaborn, Matplotlib.

Github repository: https://github.com/YSayaovong/Titanic-Dataset-Analysis

References

Max L | *Mechanical Designer, Prolec-GE Waukesha* **Phone:** 414-350-3985

Erik L | *Former Youth Leader, Hmong First Baptist Church* **Phone:** 262-290-0095

Ann | *Former Supervisor, DD Sling & Supply* **Phone:** 262-242-5501

Bobby S | *Former Pastor, Hmong First Baptist Church* **Phone:** 414-502-8528