Yu-Xiang Su

(+886)0928503936 | pansusum1997@gmail.com | felixsu1997 |

Education

M.S., Information Technology Group / Department of Civil Engineering / National Central University, Taiwan

- Selected Courses: Analysis and Visualization of Temporal-Spatial Data in Environmental Contex, Practical Environmental Disaster Monitoring, Deep Learning Analysis and Application in Disaster Prevention and Management Information

B.S., Department of Civil Engineering / National Ilan University, Taiwan

Thesis

- Predicting the energy consumption of charging electric vehicles at buildings under the trend of energy transition in Taipei

Experience

Unikorn Semiconductor Corporation\ Yield Engineer   *2023/7 - Present*

- Early Warning of Anomalies: Mastering advanced process flows to ensure timely resolution of any abnormalities in the product process and to ensure production stability.
- Reduce Defect Recurrence Rate and Improve Yield: Collaborate closely with the process team to control daily product yield; conduct experiments and process improvement evaluations to increase the company's product yield and ensure an increase in gross profit margin.
- Establishing Recipes to Enhance Machine Defect Detection Capabilities.
- Linux, Oracle, UDB System Maintenance/Excel Data Analysis, Big Data Analysis, Automated Data Retrieval.

Delta Electronics, Inc. \ Assistant Engineer   *2020/11 - 2021/6*

- Develop and validate machine programs, assuming responsibility for machine installation and maintenance.
- Conduct in-depth research and analysis of industry, product, and market trends.
- Spearhead the development, design, and implementation of manufacturing execution systems and automation-centric software for machine equipment.
- Proficiently operate and validate electron beam equipment.
- Systematically investigate and ascertain the root causes of equipment anomalies in the work environment, subsequently implementing corrective measures.

Project

Near-Zero Energy Building Energy Simulation and Assessment

- Evaluate the relevant data required for Building Energy Modeling (BEM) to assess the lifecycle energy consumption and carbon emissions.
- Develop scripts using C++ in conjunction with the Revit platform to calculate the Energy Use Intensity (EUI) indicators and associated formulas as outlined in the project.
- Utilize deep learning techniques to predict and analyze the electricity usage and environmental data for a specified public building location, demonstrating the effectiveness of the model.

Roof-mounted Photovoltaic Panel Monitoring and Data Analysis

- Development of an Intelligent Device for Photovoltaic Module Fault Diagnosis
- Hardware Configuration / Monitoring Module / Battery Charging and Discharging Module / Input-Output Control Module
- Software Configuration / Arduino Programming / Wi-Fi Module Programming / Monitoring Data Collection Program

Organizing an Online Seminar - 26th Conference on Computer Applications in Civil and Hydraulic Engineering 2021

- website development
- hosting duties
- backend technical support.

Honors & Awards

- Best Paper Award, In The 25th Symposium on Construction Engineering and Management
- Scholarship of Department of Civil Engineering
- Terminal Scholarship of Department of Civil Engineering 109-1 / 110-1

Skills

- Architecture Software：AutoCAD、Revit
- Programming：Python、Arduino、Machine Learning、Linux、Oracle
- Graphic Designer Software：Photoshop、Illustrator、Premiere

Autobiography

About Me

- My name is Felix, from Taoyuan. I enjoy reading books of various field such as economy, programming and psychology and also like to play basketball in my spare time.
- I am an efficient person and I believe communication is essential during teamwork. Therefore, I can always allocate tasks to the right people and make sure things are done effectively.

During School Years & Internship

- I have a bachelor degree in Civil Engineering at NIU. On the hand, my master study was in Information Technology at NCU. I did my thesis on Forecast Energy Transition Ratio of Electric Vehicle at Building Energy Consumption, which expose me to programming, energy analysis and machine learning.
- I got scholarship several times that I was able to further consolidate and develop my professional ability relating to civil engineering and computer science. Furthermore, it immensely improved my presentation skills as well as team collaboration skills because of all the conferences and workshops I've attended.
- Throughout my internship at Delta Electronics, I've learned to communicate with colleagues effectively, solve unexpected problems, function both as a group and individually to complete tasks within the designated timeframe.

Contribution & Developing good interpersonal relationships

- International Volunteers for Northern Thailand at the time of studying for my bachelor's degree, I took part in International Volunteers and travelled overseas to help disadvantaged communities, sharing insights of what we've learnt whilst immersing ourselves in their way of life.
- 26th Conference on Computer Applications in Civil and Hydraulic Engineering 2021 (CCACHE 2021, August 30-31, 2021 at the National Central University, Taiwan) of which I was tasked with assisting professors in holding seminars, serving as emcee and back stage technical assistant. This experience taught me the importance of communication, and develop great chemistry when working in a team.