

Lai Weixian Wilson

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EXECUTIVE SUMMARY

- CCNA and PMP certified OT Security Engineer strong in problem solving and well-versed with the industry OT & IT security standards and principles such as NIST and IEC 62443 frameworks
- Versatile leader skilled in communication, presentation, and stakeholder management
- Experienced in turnarounds & projects, construction and procurement – having successfully executed several turnaround events and construction projects

PROFESSIONAL EXPERIENCE

Shell Singapore Pte. Ltd.

Oct 2018 – Present

Operational Technology (OT) Security Engineer

Oct 2023 – Present

- Troubleshoot, configure and maintain network devices and systems in a large OT environment
- Lead and coordinate site-wide OT security risk assessment project to identify potential security threats
- Provide technical assurance to ensure adherence with the security standards and mitigate threats proactively

Cost & Benchmark Engineer | Digital Focal (MTAC)

Nov 2021 – Oct 2023

Estimated, tracked and controlled capital expenditure for a portfolio of projects and turnarounds
Coordinated all digitalization initiatives across Maintenance, Turnaround & Construction department
Highly proficient in SAP for Procurement and Total Cost Management

Achievements:

- Led a team of data analysts as digital lead in a large scale turnaround - the team performed data aggregation to derive actionable and timely reports for key stakeholders, enabling the smooth handover and completion of turnaround ahead of schedule
- Received Special Recognition Award in 2023 for digitalising a paper-based logistics asset management work process using PowerApps
- Developed a data pipeline using Power Query to automate the monthly spend report generation for the entire site – shrinking the manual processing steps from 1 week to 2 hours each month

Execution Engineer (Mechanical & Civil)

Oct 2018 – Nov 2021

Planned and executed plant turnarounds and construction projects across various assets, continuously striving towards safe, timely, and cost-efficient delivery

Achievements:

- Won the Shell Mechanical Engineering Shark Tank 2020 – secured funding to develop and implement concept for streamlining legacy piping class conversion and usage
- Awarded Bukom Ultimate Potential Journey Award 2020 for contributing as a change agent towards meeting the site's competitiveness goals
- Spearheaded the introduction of digital solutions for turnaround planning and execution – actualising cost and time savings for the business

Siemens Pte Ltd

Aug 2015 – Oct 2018

Remote Diagnostics Engineer

Aug 2017 – Oct 2018

Leveraged data analytics tools and OEM technical expertise to drive predictive maintenance and eliminate unplanned downtime for a fleet of industrial and aeroderivative gas turbine engines

Achievements:

- Developed software diagnostic agents to detect anomalies on operational parameters and proactively propose technical recommendations to customers

- Built a Google Chrome extension and data visualisation dashboard using APIs to interface with backend systems – allowing for custom aggregation and visualisation which cut down the monitoring duration of each engineer by 30 minutes everyday

Project Engineer

Aug 2015 – Jun 2017

Detailed engineering and construction management for water treatment projects
 Prepared technical sales proposals for project tenders
 Based in overseas yard as onsite technical representative for piping and mechanical equipment
 Conducted an internal audit and rolled-out a materials database to improve site materials management

Projects involved:

- Seawater Treatment Modules – Total Kaombo FPSO, Eni Offshore Cape Three Points FPSO
- Produced Water Treatment Plant – BP Khazzan Central Processing Facility

PROFESSIONAL CERTIFICATIONS

Cisco Certified Network Associate (CCNA)	Cisco	2023 – 2026
Project Management Professional (PMP)	Project Management Institute	2022 – 2025
Power BI Data Analyst Associate	Microsoft	2023

EDUCATION AND TRAINING

Degree in Mechanical Engineering (Second Class (Upper) Honours)	Nanyang Technological University	2012 – 2015
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Professional Courses Attended

Public Speaking Course	Lion City Toastmasters Club	2022
SAP HANA Introduction (HA100)	NTUC LearningHub	2022
Reliability, Maintenance and Turnaround Course	Shell	2019
Project Management	Siemens (Seoul, South Korea)	2017
Communication and Conflict Management	Siemens (Bangkok, Thailand)	2016
Finance, Marketing, Sales and Customer Focus	Siemens (Kuala Lumpur, Malaysia)	2016

TECHNICAL SKILLS

Information Technology	Coding	Engineering Software
Networking	Python	ANSYS
System Administration	Visual Basic for Applications	AutoCAD
VMware	HTML	Navisworks
SAP ERP	CSS	SketchUp
	JavaScript	SolidWorks
	Power Platform	