

Ong Swee Seng

PROGRAMMER / ENGINEER / DEVOPS

Objective

As an individual, I am deeply fascinated with how technology works and its remarkable advancement, particularly in recent years. It is truly astonishing to think that modern smartphones possess far greater computing power and memory than what was used to guide the Apollo rocket.

With such incredible leap in technological advancements and by leveraging my extensive expertise and experience in programming, engineering, and DevOps, I aim to implement scalable and reliable systems that can meet complex business needs.

By automating the deployment pipelines, optimizing system performance, and fostering collaboration across development, operations, and engineer team, I aim to drive operational efficiency, enhance software delivery processes, and contribute to the successful outcome of innovative and forward-thinking organizations.

Work Experience

2023 – Current

ST Engineering Info-Security Professional Service Engineer

- Responsible for deployment and maintenance of Data Diode and its derivative products to ensure secure, one-way data transfer in high-security products.
- Liaised with customers to understand requirements, provide support and ensure solutions that align with their specific needs and expectations.
- Provided on board and training for internal teams and external clients.
- Setting up of Virtual Machines for testing and demonstration purposes.
- Designed and implemented Bash scripts to automate repetitive tasks, streamline workflows, and enhance efficiency with regards to demonstration and testing purposes.

2020 – 2023

ASE Singapore Pte Ltd Assistant IT Programmer

- Managed the deployment, implementation, and ongoing maintenance of in-house applications that utilize both .NET and .NET framework.

2019 – 2020

Quality Coin Online Sales Manager

- Oversaw communication, sales coordination, and delivery of goods.

		<ul style="list-style-type: none"> Managed and maintained online sales platform to drive digital revenue growth.
	2017	Viziofly Programmer <ul style="list-style-type: none"> Primarily responsible for developing applications for HTC Vive, Samsung Gear, and Google Daydream platforms. Contributed to the creation of Android plugins for Unity to enhance functionality.
Education	2021 – 2024	Singapore University of Social Sciences (SUSS) BSc Information and Communication Technology (Degree) Graduated 2024 CGPA: 4.16/5.0
	2014 - 2017	Nanyang Polytechnic (NYP) Game Development & Technology (Diploma) Graduated 2017 GPA: 3.16/4.0 Committee: Treasurer, SIDM Club 2015/16
Projects	2023 – Current	Data Diode and Derivative Products Professional Service Engineer <ul style="list-style-type: none"> Responsible for installation and deploying of Data Diode and its derivative products in secure environment, ensuring that sensitive data only flows one direction only. Diagnose and resolve any issues related to Data Diode and its derivative products. Provide guidance on best practices for the integration of Data Diode into existing systems.
	2024	Automate MAC Address Configuration for Production Professional Service Engineer <ul style="list-style-type: none"> Designed and wrote a Bash script to automate the process of updating a system's MAC address across various models. Script is dynamic and can be easily configurable, allowing for more flexibility and adaptability.
	2020 – 2023	Mobile Scanner IT Assistant Programmer <ul style="list-style-type: none"> Responsible for developing, integrating, and maintaining mobile scanners for both Windows Mobile and Android platforms, supporting various departments.
	2020 – 2023	Automatic Guidance Vehicle (AGV) IT Assistant Programmer <ul style="list-style-type: none"> Integration of Vendor and Internal systems. Created Android Application that allowed production personnel to control AGVs.
	2019	Unilever AR Experience Programmer <ul style="list-style-type: none"> Took the lead in designing and implementing the core logic, including mechanisms that drive player interactions and overall experience. Managed the seamless transitions between different game states.

		<ul style="list-style-type: none"> In charge of integrating the art assets.
	2017	Montblanc Timewalker Prix Programmer <ul style="list-style-type: none"> Primarily responsible for designing and implementing the user interface and integrating social media platforms, including Facebook and Instagram.
	2016	Nemesis Perspective Artificial Intelligence (AI) Programmer <ul style="list-style-type: none"> Developed the AI for the hero character using decision-based logic. Achieved recognition as the first-ever Virtual Reality (VR) Indie Pitch Winner.
Honors and awards	2023	NS Excellence Award Recognized for exceptional performance during my Operationally Ready National Service (ORNS) training.
	2016	NYP Star Awards Recognized for outstanding academic performance and excellence in extracurricular activities.
	2013	EAGLES Awards Recognized for exemplary leadership qualities.
	2012	Good Progress Award Recognized for significant improvement in academic performance and consistent effort in studies.
Professional training	2024	Cisco Certified Network Associate (CCNA) - Completion NTUC Learning Hub, Singapore Gained hands-on knowledge on network design, configuration, and troubleshooting using Cisco technologies.
	2022	Red Hat System Administrator (RH124) – Attendance Singapore University of Social Sciences, Singapore Acquired foundational Linux system administration skills, such as user management, file permission, and basic system troubleshooting
	2022	Information Technology Infrastructure Library (ITIL) Foundation Singapore University of Social Sciences, Singapore Developed and understanding of IT Service Management principles, including service delivery and customer satisfaction improvement.
	2022	Transactional Analysis (TA101) SeraphCorp Institute, Singapore Learned psychological frameworks to improve communication, resolve conflicts, and build effective relationships in professional settings.

2020

**CASUN SLAM AGV Software Training
Innogreen Solution Pte Ltd, Singapore**

Hands-on experience with CASUN's SLAM-based software for AGVs, including system integration, troubleshooting, and optimizing of navigation routes for automated material handling solutions.

Languages

English Intermediate (Spoken and Written)

Chinese Intermediate (Spoken and Written)

Skills

Programming Language(s) C++
C#
Java
JavaScript / TypeScript
Bash
HTML / CSS
Python

Framework(s) .NET
.NET Framework
.NET MAUI
Xamarin.Forms
WPF
Winforms
Angular
React
Flask
Apache Spark / PySpark

Database(s) PostgreSQL
MongoDB
SQLite
Microsoft SQL Server

Cloud Platform and Service(s) Amazon Web Services
- EC2
- S3
- Elastic IP
- DynamoDB
- Lambda
- API Gateway

Development Environment and IDE(s) Visual Studio (2005 - 2022)
Visual Studio Code
Android Studio
Unity3D Game Engine

Platform(s) Windows / Windows Mobile
Android
iOS / iPadOS
Linux

VR / AR HTC Vive
Samsung Gear VR
Google Daydream
Unity AR Foundation

	Leap Motion
Virtualization(s)	VirtualBox VMware / ESXI Proxmox
Version Control(s)	Github SourceTree SmartGit TortoiseGit
CI/CD(s)	Ansible Jenkins Terraform Docker
Protocol(s)	SMB / SAMBA SFTP HTTP / HTTPS SMTP TCP / UDP Web Services (SOAP, ASMX, RESTful APIs)
Design and Creative Tool(s)	Photoshop CorelDraw