Lim Sze Wan





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Summary

Software Architect with master qualification and proficient Agile Software Development Model (ASDM) practitioner. Equipped with 13 years of experience and has wide knowledge of technologies used across industries.

Seasoned developer in C++ and Python. Well versed in AWS cloud architecture and equipped with hands on experience in AI and ML space.

Certifications

AWS Certified Cloud Practitioner, Amazon, 2021 - 2024 Google IT Automation with Python Professional Certificate, Google, 2021 Certified Scrum Master, CSM, 2015 - 2022 Google Analytics Individual Qualification, Google, 2020 - 2021 Cisco Certified Network Associate, CCNA, 2007 - 2010

Skill Highlights

- Programming (C, C++, C#, etc.)
- Scripting (Python, R, JavaScript, PHP, etc.)
- Deep Learning & Machine Learning (TensorFlow, PyTorch, Google OR-Tools, etc.)
- Database (Redshift, MySQL, MongoDB, etc.)

Experience

Western Digital (WDC)

Position Title : Principal Software Engineer

Duration : Dec 2018 – current

Accomplishment & Experience:

- Lead data science and machine learning team.
- Extract and analyze big data in the production floor and implement improvement plans that lead to lights out manufacturing (Industry 4.0).
 - Designed and developed solution to perform optimized task assignment and routing of Autonomous Robotic Vehicle (ARV) in production floor. Doubled the ARV productivity without increasing ARV.

- Version Control (Git/Bitbucket, SVN, CVS, etc.)
- Automation (LabVIEW, MATLAB, etc.)
- Project Management
- Presentation & Public Speaking

- Designed and developed a systemic solution for defect detection in the manufacturing environment
 - Software that performs in-line defects detection using multiple machine learning algorithms.
 - Software that trains machine learning models automatically.

Motorola Solutions (MSI)

Position Title : Software Architect

Duration : May 2017 – Nov 2018

Accomplishment & Experience:

- Led various Malaysia development teams to deliver features for Motorola APX series radios.
 - Feature architect for Location-On-Receive (LOR) capability. Defined the software architecture on the two-way radio as well as the ASTRO 25 standard.
 - Designed and developed the architecture of various software and hardware capabilities on latest APX Next Two Ways Smart radios of Motorola Solutions. This includes enabling the key feature Virtual Assistant 'ViQi' on APX Next Radios.

Materialise NV (MTLS)

Position Title : Senior Software Engineer

Duration : April 2016 - April 2017

Accomplishment & Experience:

- Led Malaysia team to deliver 3D modeling software, 3-matic 12.0.
- Experience in developing 3D modeling software.
 - Enabled scripting capabilities on the software.
 - Created infrastructures and other functionalities such as editor, autocomplete, module caching, etc. to enable scripting capabilities.
 - Enabled feature tracking capabilities on the software.
- Experience in GUI development using MFC.
- Experience in TFS source control management and build system.
- Experience in Test Driven Development (TDD) method with Microsoft Test Framework.

Motorola Solutions (MSI)

Position Title : Senior Embedded Software Engineer

Duration : August 2011 – March 2016

Accomplishment & Experience:

- Experience in developing software for APX series radios which runs on Nucleus RTOS and ARM.
 - Led ergonomics development team to deliver Site Selectable Alert feature. Created new ergonomics applications and interfaced with the signaling layer.
 - Developed low level RF drivers to control RF performance of these radios.
 - Developed low level time of day driver and various DAC (Digital to Analog Converter) drivers.

- Enabled text to speech application on these radios.
- Developed ergonomics Bluetooth manager, voice announcement and text messaging applications.
- Experience in Linux development environment.
- Experience in ClearCase and GIT version controlling.
- Experience in Test Driven Development (TDD) method with CppUTest.
- Patent filled: US20170123636A1 Method and apparatus for morphing and positioning objects on a touch-screen device to aide in one-handed use of the device

Intel (INTC)

Position Title : Software Development Engineer

Duration : June 2008 – July 2011

Accomplishment & Experience:

- Experience in the test domain.
 - Developed test program offline validation simulator. The simulator is built on OPENSTARcompliant, T2000 platform. It is used to validate and debug test programs offline prior to running the test program online on real tester resulting in 50% test time reduction and 30% of test cost reduction.
 - Provided test solutions and developed test libraries. These libraries are used across organizations to test the systems, chipsets and platforms.
 - Delivered solution to accelerate the development cycle and PDE learning curve through model block simplification.
- Experience in Windows and Microsoft Visual development environment.
- Experience in TortoiseSVN version control.

Education

Master's Degree	
Field of Study	: Engineering (Electric and Electronic)
Major	: Microelectronics
Institute/University	: Multimedia University, Malaysia
Graduation Date	: August 2012
Related Coursework	: Semiconductor Devices and Properties, Integrated Circuit and VLSI Design,
	Advanced Microprocessor System

Bachelor's Degree

Field of Study	: Engineering (Computer and Communication System)
Major	: Computer System
Institute/University	: Universiti Putra Malaysia, Malaysia
Graduation Date	: May 2008
Related Coursework	: Object Oriented Programming, Scripting, Web Design, Database, Low Level
	Programming, Networking, Wireless and Radar System