

Liu Chee Wei (Jacky)

R&D Software Lead Engineer · EV/ADAS Test Automation · OpenTAP/PTEM · LiDAR

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SUMMARY

Software architect and lead engineer with 13+ years across automotive test automation, semiconductor equipment, and entrepreneurship. At Keysight Technologies, led the architecture of PTEM on OpenTAP for global EV/ADAS programs and co-invented two US-patented LiDAR simulation systems. Combines deep technical expertise in C#, C++, and Python with Agile leadership and a systems-first approach to building purposeful tooling. Applies AI purposefully — identifying where it creates real leverage, designing the interaction, and shipping working tools around it.

EXPERIENCE

R&D Software Lead Engineer

Oct 2019 – Present

Keysight Technologies Malaysia, Penang

- Led architecture and development of PTEM built on OpenTAP for EV/ADAS test automation
- Served as Scrum Master and established SQ release process for global automotive projects
- Started as main developer for LiDAR Target Simulator (E8717A) — resulted in 2 US patents

Motion Control & Software Dev Senior Engineer

Apr 2016 – Sep 2019

WAFTECH, Penang

- Built next-gen machine control software using C# and WPF
- Implemented SECS/GEM integration for semiconductor equipment communication
- Led on-site deployments and mentored junior engineers

Co-Founder

Apr 2011 – Mar 2016

Makerzone Sdn Bhd, Penang

- Founded a 3D printing service business from the ground up
- Built and managed the company marketing website
- Handled end-to-end customer projects from design to delivery

Machine Automation Software Engineer

Oct 2014 – Apr 2015

WAFTECH, Penang

- Developed motion control and wafer handling software in C# and WPF

R&D System Engineer

Jun 2011 – Oct 2014

Keysight Technologies Malaysia, Penang

- Developed automotive test systems using C++
- Supported TS-5000 hardware handler library

PATENTS

[US20220260714A1](#)

Automated LiDAR Target Simulation Scanning Systems & Methods

[US20230132855A1](#)

Automated LiDAR Target Simulation Scanning Systems and Methods

SKILLS

Languages	C#, WPF, C++, Python, JavaScript, PowerShell
Frameworks	OpenTAP, PTEM, .NET, Docker, Jenkins, Azure DevOps, Git
Domain	EV/ADAS, LiDAR, HIL Testing, SECS/GEM, Automotive SPICE, EV Manufacturing
Leadership	Scrum Master, Software Architecture, CI/CD, Agile
AI & Dev Tools	Claude API, Prompt Engineering, AI Agent Design, REST APIs, Cloudflare Workers

EDUCATION

CERTIFICATIONS

Agile SCRUM for Practitioners

Feb 2026

DreamCatcher Consulting

Practical AI with Machine and Deep Learning

Mar 2021

DreamCatcher Consulting

Last updated: April 2026