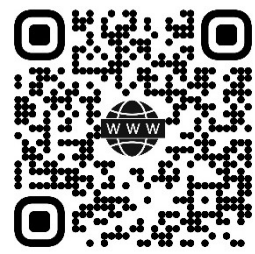


JAZEREEL LYDIA GOH REIKO



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Mechatronics trained engineer with a track record of architecting custom automation solutions across high-compliance banking and industrial environments. I specialize in identifying systemic bottlenecks and replacing manual friction with custom developed Python and VBA automation tools to scale engineering productivity. Additionally, I possess deep hands-on experience in managing high-availability virtualized environments using Proxmox and Docker.

Languages	Python (Flask, Kivy, Rich, NLTK), SQL (HIVE), VBA, Bash, PowerShell, Batch, Java, C#, C++, SenseTalk, HTML
Automation & Testing	Selenium, jBehave (BDD), Digital.ai (SeeTest), Eggplant Functional, ADB, Postman
Infrastructure	Proxmox VE, Docker, NGINX Reverse Proxy, Cloudflare Zero Trust, 10Gbps Fibre SFP+ Networking
Systems Integration	Mechatronics & Robotics, IoT Protocols (ZigBee, Home Assistant), Cryptographic Payload Implementation (DES3)

EXPERIENCE

DBS SINGAPORE

MANPOWER STAFFING
SERVICES (SG)

PERCEPT SOLUTIONS

2023 – Present

TEST ANALYST (MANUAL / AUTOMATION)

- Architected and developed a custom, terminal-based **TWQR Payment Generator** using **Python** and DES3 cryptography; successfully **reverse-engineered regional specifications** to establish the first internal testing baseline for the Taiwan market integration and unblock early UAT cycles.
- Migrated a legacy, macro-heavy VBA utility into a high-performance, **dual-mode (CLI/TUI) engineering tool**, integrating **automated REST API validation loops** via Python and native PowerShell to programmatically audit encrypted JSON payloads against live backend schemas.
- Engineered **multi-threaded TUI and GUI applications** using Python’s **py_cui**, **Rich**, and **Kivy** to automate complex QR payload sanitization, generate automated velocity reports directly from **Jira APIs**, and streamline environment provisioning.
- Accelerated critical defect detection by delivering localized **internal validation capabilities months ahead of scheduled project milestones**, significantly minimizing late-stage deployment risks.
- Designed and executed **BDD-driven automation test suites** using **jBehave** and **Digital.ai (SeeTest)**, ensuring cross-platform stability and interface consistency across **iOS, Android, and web configurations** for regional retail banking applications.

SIEMENS SG

ANOTECH ENERGY

2022

METRICS VALIDATOR / SOFTWARE TEST ENGINEER

- Engineered data validation pipelines using **Python** and **Hive SQL** to extract, transform, and audit massive, multi-format datasets, ensuring absolute data integrity for the **Rail Enterprise Asset Management System (REAMS)**.
- Developed and deployed **NLP text-processing scripts** using Python's **NLTK** to parse, clean, and resolve ambiguous end-user inputs, standardizing raw data injection for predictable pipeline processing.
- Spearheaded **deep-dive troubleshooting of production data anomalies**, pinpointing algorithmic discrepancies and implementing programmatic fixes to meet stringent **SLA reporting deadlines**.
- Designed comprehensive **SIT and UAT frameworks** to validate end-to-end data pipelines against complex **System Requirements (SRS/SDS)**, securing mission-critical compliance across **LTA and ST Engineering stacks**.
- Drove collaborative technical delivery within an **Agile/Scrum framework**, managing version control via **GitLab** and managing cross-functional defect lifecycles in **Jira**.

KEYSIGHT SG

AUDACIX PTE LTD

2021 – 2022

AUTOMATED SOFTWARE TESTING CONSULTANT

- Architected the migration of legacy manual test suites into robust, production-grade automated frameworks utilizing **Selenium WebDriver** and **Keysight Eggplant Functional**, radically accelerating **regression execution cycles**.
- Mastered and deployed proprietary **SenseTalk scripting** to develop complex, **image-based and model-driven UI automation workflows**, maximizing script reusability across highly dynamic interfaces.
- Diagnosed and debugged core software defects within proprietary **Human-Machine Interface (HMI) applications** using **C#**, actively collaborating with development teams to push stable code fixes.
- Engineered rigorous **negative testing methodologies** to systematically inject adversarial, out-of-scope inputs, exposing critical **edge-case vulnerabilities** and securing system resilience.
- Formulated strict **UAT mapping strategies** to cross-validate automated execution outputs against historical manual baselines, ensuring **100% parity** and reporting accuracy.

OCBC BANK SG

COMTEL SOLUTIONS

2020 – 2021

TEST ANALYST

- Spearheaded end-to-end testing and launch validation for a **high-volume Equities trading engine**, ensuring seamless order execution, real-time data synchronization, and **multi-broker integration**.
- Engineered and deployed a custom **SGQR engine validation framework** to audit and verify **EMVCo-compliant QR payloads**, hosting a live standalone technical portal to serve as a cross-team benchmarking tool.
- Developed custom automation scripts and targeted macros to programmatically accelerate internal environment setup, automating tedious data workflows like **bulk account provisioning** to slash testing overhead.
- Designed adversarial testing matrices, orchestrating **stress tests** and cross-functional **UAT loops** to uncover hidden **memory leaks, race conditions, and integration edge cases** prior to release.

COVID-19 SUPPORT

HEALTH PROMOTION BOARD

RAFFLES MEDICAL GROUP

2020

HPB SWABBER / HEALTHCARE ASSISTANT

- Awarded the national **COVID-19 Resilience Medal** for outstanding operational resilience and frontline service during a global public health crisis.
- Managed and audited critical data entry for the **national COVID-19 database**, ensuring absolute data integrity, zero lag in transmission, and strict compliance with **Ministry of Health (MOH) reporting standards**.
- Executed rapid-response frontline operations across multiple quarantine and swabbing facilities, strictly maintaining **bio-security protocols** and managing end-to-end procedural workflows under intense operational pressure.

VENTURE PTE LTD SYSTEMS TESTER

BEYONDSOFT INTERNATIONAL

2019

- Managed a secure, **air-gapped Linux testing environment**, developing and deploying a custom library of **automated Bash scripts** to execute **kernel-level diagnostic routines** and hardware validation.
- Validated specialized micro-electronics and firmware for complex **HMI systems**, systematically ensuring **signal integrity** and stable data handshakes between custom hardware and control interfaces.
- Engineered novel **hardware validation protocols** to stress-test prototype logic, identifying **edge-case firmware anomalies** and significantly reducing manual verification cycles.

RAZER SG

BEYONDSOFT INTERNATIONAL

2018 – 2019

TEAM LEADER

- Directed high-throughput testing operations at scale, coordinating and mentoring a force of up to **30 QA analysts and sub-team leads** to ensure seamless delivery across multiple parallel product lines.
- Architected comprehensive **UAT frameworks for next-generation prototype hardware and software**, establishing the rigorous quality and stability baselines required for global commercial releases.
- Served as the **primary technical liaison**, translating complex testing telemetry and defect patterns into actionable **hardware and firmware refinements** directly with core design engineers.
- Engineered custom **Excel macros** and **AutoHotkey automation logic** to programmatically eliminate repetitive manual telemetry logging, optimizing team-wide data collection speeds.

HP SINGAPORE

BEYONDSOFT INTERNATIONAL

2018

SOFTWARE TESTER

- Executed aggressive hardware-software validation on prototype printing systems using specialized hardware probing tools (**oscilloscopes**) and extreme environmental **thermal stress** to isolate physical and digital failure thresholds.
- Captured, analyzed, and reconstructed complex, **non-linear system defects**, thoroughly documenting erratic failure states to provide firmware engineering teams with actionable **root-cause telemetry**.
- Designed structured **regression test scenarios spanning hardware-firmware boundaries**, ensuring new prototype iterations maintained behavioral parity across varying operational parameters.

MANUFACTURING TECHNICAL SPECIALIST INTEGRATION TECHNOLOGY LTD

i. PAC MANUFACTURING

CASEM (ASIA)

AMS MICRON

2016 – 2018

- Managed the assembly, testing, and high-precision **kinematic calibration of advanced silicon wafer "pick and place" robotics**, guaranteeing **micron-level alignment** within high-speed semiconductor manufacturing lines.
- Configured, calibrated, and validated **3D machine vision cameras** utilized for automated chip scanning, ensuring seamless integration between high-speed physical optical capture and backend digital defect detection software.
- Deployed to critical client production sites (including **AMS Micron**) to drive onsite systems integration, provisioning, and **deep-dive troubleshooting** of complex semiconductor processing equipment within strict **ISO cleanroom environments**.

EDUCATION

SINGAPORE
POLYTECHNIC

DIPLOMA IN MECHATRONICS AND ROBOTICS

ACHIEVEMENTS

- 2023 COVID-19 Resilience Medal: Ministry of Health (No. 30448)
- <https://www.pmo.gov.sg/national-awards/covid-19>
- 2022 DATA ANALYTICS FOR EVERYONE: DESCRIPTIVE ANALYTICS
- <https://www.credential.net/d1d7fe0e-e46c-4679-9007-51e7d05c4767>
- DATA ANALYTICS FOR EVERYONE: PREDICTIVE ANALYTICS
- <https://www.credential.net/32401dbe-c4c1-42df-9fa2-9ada6c196acc>
- AI FOR EVERYONE: AI4E
- <https://www.credential.net/f22d58dc-4d20-4b22-93eb-87cb737f3ed1>
- TAGUI: BEGINNERS COURSE
- <https://www.credential.net/41ef2abd-548b-4e65-a66a-ffb1ff134653>
- 2021 EGGPLANT FUNCTIONAL LEVEL 1 - EXPERT
- <https://certificates.easy-lms.com/exam/session/dc6ba612-56ee-42d3-b1b7-31d1b35d40fc>
- KEYSIGHT: COUNTERFEIT AWARENESS
- 2020 AI FROM THE DATA CENTER TO THE EDGE – AN OPTIMIZED PATH USING INTEL® ARCHITECTURE
- <https://www.youracclaim.com/badges/e712c792-21cf-4316-b3b0-58a97c09b834>
- AI FOR EVERYONE: THEORY
- <https://www.credential.net/3201edbd-4a71-4fd1-9e31-7e75f2ec165c>

AI FOR INDUSTRY: FOUNDATIONS IN AI

- <https://www.credential.net/88f0a40e-2c80-4ef6-b541-ee6995f919d4>

AI FOR INDUSTRY: LITERACY IN AI

- <https://www.credential.net/80cda141-de3e-4130-93de-23feaa329a23>

HPB: INFECTION PREVENTION AND CONTROL FOR HEALTH CARE SUPPORT

- <https://be.gnowbe.com/8bzez>

2016

BUSINESS ETHICS FOUNDATION: CERTIFICATE OF COMPETENCY

2014

DISTINCTION FOR INDUSTRY TRAINING PROGRAM

2005 / 2003

National Junior Robotics Competition - EXCAVATION SURVEY TEAM: H2O / BERMUDA TRIANGLE

INTERESTS

ROBOTICS

Programming, Artificial Intelligence, Big Data, Fabrication, Assembly and Testing.

IT & NETWORKING Has successfully designed and put in place an active 10Gb/s optical fiber network. Have designed and built a portable touch screen 4G/LTE Wi-Fi router using a Raspberry Pi. Completed a NAS personal side project.

3D DESIGN

Mechanical and Electrical 3D Solids Design.

MULTIMEDIA

Mixing Music, Making Videos and Special Effects.

GAMING

Making Mods and Finding Exploits.

SPORTS

Cycling: Stunts and Long Distances.

OTHERS

Enjoy coming up with new ideas to improve life (think-tank style).

REFERENCES

KELLIN ER

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- www.linkedin.com/in/kellin-er

AVAILABILITY

NOTICE PERIOD

1 MONTH

