

Morris Lee Thean Chien

Blk 221 Pending Road #09-137 Singapore 670221

Hp: 9060 2101

Email: jinshuilee@gmail.com

Objective	<p>To secure a challenging position as a Solution Architect, I aim to leverage my fast, systematic, and evidence-proven learning system, along with my expertise in full-stack development, architecture design, and team leadership to drive innovative and scalable solutions.</p> <p>Most importantly I am a fast, efficient, and passionate learner.</p>
Academia	<p>Honours Degree in Bachelor of Electrical and Electronic Engineering, Major in Computer, Nanyang Technological University</p> <p>Acquired knowledge in the following topics</p> <ul style="list-style-type: none">• Microprocessors• Computing• Computer architecture• Data communications & networking• Electronics• Computer system software• Software engineering
Employment	<p>Senior Engineer (Jan 2009 – Jun 2023)</p> <p>LTA</p> <ul style="list-style-type: none">• Developed an Android mobile app for Mobile Inspection Device using Java and C++. The app is used to inspect transit tickets used on Singapore public transports. It provides features like card reading, OCR, paper printing, bar code scanning, application upgrade through EMM solution, WIFI connection, Bluetooth connection, MQTT communication, REST API communication, SQLite database, ROOM database etc.• Lead a team in developing a Bus Location System for Singapore public buses running on Linux OS. The device is equipped with GPS module, gyroscope and odometer. It can predict the coming and leaving bus stop even the bus is out of the GPS coverage.• Lead a team to enhance and maintain New On-Bus Equipment for Singapore public transport. The device is used for charging fare on CBT CEPAS cards, ABT CEPAS cards and EMV cards.• Enhanced and maintained gate device used in Circle Line running on VxWorks. The device is used for charging fare on cards.• Maintain Key Management Facility, which is used for generating, storing, protecting cryptographic keys used in Singapore public transport. The application is developed using Qt.• Maintain ISIF which is used for card encoding. The application is written in Java and using Java Swing as its GUI framework.

	<ul style="list-style-type: none"> Enhanced and maintained libraries such as distance-based fare calculation module. Developed a client-side web application to list all the cards transactions using Angular and integrated with Java Spring services through RESTful API. Developed a Java application to import and manage key for Utimaco Security Server using JavaFX. Developed a prototyping of service providing remote card personalization using software-based security solution from SafeNet. The communications between the front-end application and the Tomcat-based service were encrypted. Managed an accredited CEPAS Card Test Centre. The centre was responsible for conducting testing and certification of CEPAS cards and related systems. Its purpose is to ensure that CEPAS cards meet the required standards and specifications for functionality, security, and interoperability. Responsible for the asset tracking of a team of ten members. Organized the team building activity. <p>Software Engineer (Oct 2007 – Nov 2008)</p> <p>Longcheer Technologies Ptd Ltd</p> <ul style="list-style-type: none"> Develop and debugging Windows Mobile phone based on Qualcomm MSM7200 system solution. Develop and debugging driver for Windows Mobile phone on headset switch detection, audio path switching, motion sensor, touch screen, jog dial, jog wheel, keypad. Debugging using Windows CE Platform Builder, Qualcomm's QXDM, Microsoft's Celog Running Logo Testing using Logo Test Kit (LTK) <p>Software Engineer (Oct 2005 – Sep 2007)</p> <p>CCT Technologies Ptd Ltd</p> <ul style="list-style-type: none"> Develop application for embedded Linux product (ARM). Develop MMI layer for WIFI radio and integrate wireless tool into software. Customize application for cordless phone system and phone docking system. Configure cordless phone for different customers. Debugging Bluetooth profile for cell phone docking station Debugging cordless phone file downloader program <p>Quality Control Engineer (Mar 2004 – Sep 2005)</p>
--	--

	<p>I'm Technologies Ltd</p> <ul style="list-style-type: none"> • Giving advise on quality control process. • Participate in evaluating ERP products for company. • Design and compile process flow of each department and ensure the interlink between each department. • Help company pass the ISO 9001 certificate. <p>Property Agent (Aug 2003 – Feb 2004)</p> <p>BestComm Property</p> <ul style="list-style-type: none"> • Facilitating the matching process between landlords and tenants. • Coordinate house viewings to ensure a smooth and efficient experience for both parties. • Handle all necessary documentations, such as preparing the Letter of Intent, Tenancy Agreement, and Inventory List, ensuring accurate and legally compliant paperwork throughout the rental process. <p>Application Engineer (Mar 2003 – Jun 2003)</p> <p>Bizit Technologies Pte Ltd</p> <ul style="list-style-type: none"> • Develop and debugging MMI machine control terminal. • Software troubleshooting <p>Service Engineer (Sep 2002 – Nov 2002)</p> <p>Digilab, LLC Singapore Branch</p> <ul style="list-style-type: none"> • Service supports to end-users including installation, commissioning and on-site operator training to users. • Troubleshooting and repair of products • Response to service call, understand the customer needs and complaints on product break down, system errors and software errors.
--	--

Projects	<p>Industrial attachment</p> <p>Penang Design Center, Intel Microelectronics (Malaysia) Pte Ltd</p> <ul style="list-style-type: none"> Automated simulation tasks using C Shell scripts and Perl scripts <p>B.Eng Final Year Project: Echo Cancellation in Hand Free Mobile Phone (Jun 2001 – Jun 2002)</p> <ul style="list-style-type: none"> Implemented and echo cancellation algorithms for hand-free mobile phone. Performed simulation using MATLAB and Analog Devices software, ADSP Visual++ Programming in Analog Assembly language Interfaced Analog Devices DSP board to I/O devices. Design of hardware configurations to meet the real time environment specifications. <p>Computer system design</p> <ul style="list-style-type: none"> Interfacing the Microprocessor to Memory and I/O devices (outside world) Developing Microprocessor software at Assembly Language level Performing system integration (Software and hardware integration) Design of a Microprocessor-based display system which was based on Intel 8086 processor.
-----------------	--

Relevant Knowledge	<p>Software Engineering Skills</p> <ul style="list-style-type: none"> Design principles, Clean Architecture, hexagonal architecture, MVVM, MVC, MVP <p>IDE</p> <ul style="list-style-type: none"> Android Studio, Visual Studio, Visio Studio Code, Eclipse, QNX Momentics, Windows CE Platform builder <p>Version Control</p> <ul style="list-style-type: none"> git, SVN, Dimension CM <p>Library and Frameworks</p> <ul style="list-style-type: none"> Spring, Spring Boot, JNI, DOM, Qt <p>Web Development</p> <ul style="list-style-type: none"> HTML, CSS, Angular, Servlet, JSP, JSF <p>Web Technologies</p> <ul style="list-style-type: none"> RESTful APIs SOAP <p>Build Tools</p> <ul style="list-style-type: none"> Maven, Gradle, npm, webpack, GNU make, Ant <p>Testing Frameworks:</p> <ul style="list-style-type: none"> Junit <p>Cloud Computing</p> <ul style="list-style-type: none"> Amazon Web Services (AWS) <p>Databases</p> <ul style="list-style-type: none"> MySQL, SQLite, ROOM, Hibernate <p>Data Formats</p> <ul style="list-style-type: none"> XML, DOM, JSON, CSV <p>Programming Skills</p> <ul style="list-style-type: none"> Java, C, C++, Kotlin, TypeScript, Unix Shell, C#, Perl <p>Operating Systems</p> <ul style="list-style-type: none"> Windows, Linux, QNX, Unix <p>Others</p> <ul style="list-style-type: none"> Blockchain principles, Bluetooth, OSI, JVM Cryptography, PKCS#7, PKCS#12, PEM, Kerberos, OAuth 2.0, OpenID Connect, SAML, key distribution, PKI Obsidian
---------------------------	--

Personal Particulars	<p>Gender: Male</p> <p>Race: Chinese</p> <p>Nationality: Singaporean</p> <p>Written languages: English, Mandarin, Malay</p> <p>Spoken languages: English, Mandarin, Malay, Hokkien, Cantonese</p> <p>Interests: Reading, note taking using Obsidian, learning, jogging, hiking</p> <p>Strength: Independent, responsible and interest in learning new knowledge</p> <p>Advanced notice: One-month notice</p>
-----------------------------	--