Jerome Lieow

https://www.linkedin.com/in/jeromelieow/
https://github.com/jlieow

Contact:
jeromelieow@gmail.com
90701512

Avionics engineer with the Republic of Singapore Air Force (RSAF) and developer of the first Singapore Armed Forces mobile app. A self-starter with a broad set of technical skills and a track record of improving existing systems and processes.

Professional Experience

Skills	Proficiency
Java	4.0 / 5.0
C/C++	4.0 / 5.0
Python	3.5 / 5.0
JavaScript	3.5 / 5.0
HTML/CSS	3.5 / 5.0
Dart	3.0 / 5.0
Swift	3.0 / 5.0
PHP	2.5 / 5.0
SQL	2.5 / 5.0

Avionics Centre Staff Officer, Singapore, Feb 2019 – Current Position
- Responsible for the airworthiness of the F-15SG's avionics and electrical system.

Deputy Officer in Command of the Exercise Wallaby AH-64D Integrated Maintenance Flight, Rockhampton, Australia, Jan 2018 – Nov 2018
- Led a cross-functional team of 50 technicians across 3 bases to successfully provide the maintenance support of 4 AH-64Ds.

Officer-in-Charge AH-64D Apache Fire Control System, Singapore, Jan 2017 – Feb 2019
- Led a team of 7 radar and sensor technicians working to support aircraft recovery alongside different functional teams.

Project Officer, Logistics Planning Branch, Singapore, July 2016 – Jan 2017
- Responsible for the analysis of manpower and training data for forward planning, and development and exploration of automation tools.

Software Development Projects

Website Resume (ReactJS), Oct 2020 – Present,
https://jeromelieow.netlify.app/
- Website resume built with React.

Software Used (Purpose)
- Visual Studios, ReactJS

SwiftTest (Android), Feb 2020 – Present,
- Android mobile application to manage COVID-19 swabs.

  Features include:
  - OCR for scanning 11B, Driver's License, Pink IC, Barcode Code 39 and QR code to quickly generate a label with the patient's full Name, NRIC and date of birth.
  - Bluetooth connection to a Brother bluetooth label printer QL-820NWB for printing.
  - Storage of patient details in a cloud database.

  A separate website created to generate QR codes can be found here:
  https://swifttest-qr.web.app/

Software Used (Purpose)
- Android Studio, Java (Mobile Development)
- Firebase (Login Authentication and Database)
- React (Website)

SwiftMED (Android), Feb 2020 – Present,
https://play.google.com/store/apps/details?id=com.swiftoffice.swiftmed
- Android mobile application designed to facilitate contact tracing through Bluetooth for the COVID-19 virus and communicate with TraceTogether.

  Features include:
  - A health declaration and temperature taking feature
  - Telemedicine using third party libraries
  - A COVID-19 Symptom Checker in collaboration with the National

Software Used (Purpose)
- Android Studio, Java (Mobile Development)
- Firebase (Login Authentication, Database and Push Notifications)

Kingfisher 6 Mobile Application (iOS and Android), Jul 2017 – Feb 2019

- A cross platform corporate mobile application solution to automate work processes and act as a repository for open source engineering data, utilized by 100+ people.

Software Used (Purpose)
- Outsystems (Full stack, cross platform)

APGC 10 Anniversary Mobile Application, May 2018 – Sep 2018

- A cross platform mobile application for a corporate anniversary event used by over 1000 invited guests.

Software Used (Purpose)
- Outsystems (Full stack, cross platform)

Military Transport Risk Assessment Mobile Application (Android), Individual Project, Nov 2016 – Jul 2017 (https://github.com/jlieow/MTRAC)

- Android mobile application to allow the submission, assessment and approval of a transport operator's risk assessment form before the start of each journey with push notifications and database archival.

It was awarded the Chief of Defence Coin for being the Singapore Armed Forces first successful mobile application.

Notable Mention: https://www.facebook.com/watch/?v=1790515461041705

Software Used (Purpose)
- Android Studio, Java (Mobile Development)
- Firebase (Database and Push Notifications)
- Google Maps Platform (Submitting API requests to retrieve addresses)
- Outsystems (Database)

Multispectral Photometric Stereo Imaging system for Precision Agriculture, Oct 2015 – Apr 2016

- Design Lead of the PCB design and fabrication for a selected image sensor and a lighting array interfaced to a Texas Instruments C6748 digital signal processor (DSP).
- Software lead for the program used to control the lighting array and the sensor for image capture and processing.

Software Used (Purpose)
- Altium (PCB design)
- Texas Instruments Compiler, C language (To control the camera sensor's frame rate, associated lighting array and image capture.)

Smart Home Thermostat Body Monitoring Device, Oct 2014 – Apr 2015

- Developed a thermostat Wi-Fi controller with web and mobile control and database archival by sensing the blood level present in the user's skin through photoelectric plethysmography using the Spark IO micro-controller.

Software Used (Purpose)
- MIT App Inventor (Mobile Development)
- Google Sheets (Database)
- Spark IDE (Arduino based Micro-controller)
- HTML and JavaScript (Website Development)
- PHP (For routing of HTTP requests between website, app, device and database)

Other Skills

Native Proficiency in English and Mandarin
Elementary Proficiency in Spanish

Education

University of Manchester, Manchester, United Kingdom
MEng in Electrical and Electronics Engineering, 2013 –2016

Hobbies/Interests

Gym, running, rock-climbing, dragon-boat, going on treks, travel, investing, going out with friends, learning.