QUEK XIAN YI ERWIN

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Github | LinkedIn | Portfolio

EDUCATION

National University of Singapore   **Aug 2020 - May 2024**
Bachelor of Computing Computer Science, Honours
- University Scholars' Programme (USP)

AWS Academy Graduate   **Aug 2021**
- AWS Academy Cloud Foundations

Google Cloud   **April 2022**
- Google Cloud Courses

Google Cloud Fundamentals: Core Infrastructure   **June 2022**

TECHNICAL SKILLS

- Programing Language: Python, Javascript, Java, SQL, and HTML+CSS, Dart
- Software Framework: Python-Django, React-Native, and NodeJS, Cypress, Flutter
- CI/CD Tool: CircleCi
- Design Tool: Figma, Miro Photoshop, Illustrator

WORK EXPERIENCE

Mobile Developer Intern, Endowus, Singapore   **Aug 2022 - Current**

Quality Assurance Engineering Intern, Endowus, Singapore   **May 2022 - Jul 2022**
- Worked closely with a Senior QA Engineer to design and build a Web UI E2E automation framework.
- Contributed and helped maintain the Web UI E2E Automation Test Suite using Cypress and CircleCi.
- Initiated an independent project to explore how to optimize existing test runs on CircleCi, and managed to reduce time taken by ~50%.
- Involved in both test plan and test case creation/execution to test a new feature release on both Web and Mobile Applications.

Data Entry, Grab Holdings Inc, Singapore   **Feb 2020 - Jul 2020**
- Initiated an independent project to explore the current Zeus (CMS) system, designed testing procedures, and discovered the capability of an automation tool.
- Conceived a new workflow (automation) to significantly improve the efficiency of their current workflow (manual), to about 72%.
- Managed team members in Singapore and the Philippines through Slack and Zoom, taught and distributed workload to help ensure the smooth operation of the GrabFood and GrabMart platform, especially during the hectic COVID-19 Circuit Breaker period.

PROJECTS

Team Lead, NUS Computing Lifehack (Hackathon)   **Jul 2022**
- Led and distributed manageable tasks to 2 other teammates to build a Python telegram chat bot that hides and encrypt messages in pictures.
- Implemented encryption methods such as Caesar Cipher, AES and RSA.
- Integrated both Image Steganography and Encryption implementations into the telegram chat bot logic.
- *Award: Security Theme - Honorable Mention (Top 5)*

Team Lead, Tiktok Youth Camp   **May 2022**
- Led and delegated work to 3 other teammates to build a Hangman game using react.
- Taught and guided 2 teammates who were new to software development.
- Developed the frontend of the web application, adding features like dark mode and animations.
- *Awards: 3rd Most popular, 3rd Most Technically Challenging, 3rd Best User Experience.*

Backend Developer, Intelligent Tutoring System   **Jan 2022 - Apr 2022**
- Collaborated with 3 project mates to develop a Control Flow Graph Alignment Java module to produce a mapping between two program objects.
- Implemented some aspects of the Structural Alignment modules and designed some aspects of the test suite, achieving about 97% line and statement coverage.
- Took the initiative to arrange team meetings and took charge of the project management documentation and update Gantt Chart.

Team Lead, Hack&Roll (Hackathon), Singapore   **Jan 2022 - Jan 2022**
- Led 2 team members to build a telegram chatbot to prompt social interactions within a Telegram group by initiating randomized conversations.
- Programmed the chatbot using Python, Google Sheets (database), Telegram Bot, and Tiktok API.
- Implemented a telegram bot command feature that enables users to search and get Tiktok videos through the bot.

Backend Developer, Office Booking System   **Oct 2021 - Nov 2021**
- Collaborated with 3 team members to build a database management system using Postgres SQL.
- Designed the Entity-Relationship Data model and Relational Database Schema for Booking Procedures.
- Implemented SQL Functions and Procedures for Booking Procedures.

Developer, NUS Medical Education Grand Innovation Challenge   **Mar 2021 - Oct 2021**
- Interacted with 7 team members from diverse backgrounds on developing a web application for Medical students to have a "one-stop" site to access medical information, resulting in a Top 8 finish.
- Built a prototype site using Python and Django Web framework, and produced some frontend templates to replicate the designs developed by the UI/UX team.

[Software Developer, NUS Orbital 2021 - Apollo 11](#)   **Jun 2021 - Aug 2021**

- Partnered up with 1 team member to build a web application with Python-Django web framework that aims to provide NUS students with a learning and social platform to build connections.
- Built using Python, Django, SQLite for the backend, Google Cloud Storage and Amazon S3 API for storage, Heroku for deployment.

[Backend Developer, NUS Computing LifeHack (Hackathon)](#)   **Jul 2021 - Jul 2021**

- Collaborated with 3 team members to build a Web Application, React and Python was used to build front and backend respectively, winning 2nd Place.
- Wav2Lip, a pre-trained machine learning model, was integrated along with a translation API to provide interesting text-to-speech functionality.
- *Award: Social Theme - First Runner-Up*

[Frontend Developer, DSTA CodeEXP (Hackathon)](#)   **Jun 2021 - Jun 2021**

- Collaborated with 3 team members and a mentor to build a Native mobile application for home-based businesses in Singapore to market their products to consumers.
- Created the UI/UX for the mobile application using Figma and assessed the UI/UX using Expo Go for product testing.
- Designed a slide deck that was used to pitch our project.

CO-CURRICULAR ACTIVITIES

Designer, SunNUS 2022 (NUS Students' Sports Club)   **Nov 2021 - Present**

- Improved branding of the event by designing a new logo using Adobe Photoshop and Illustrator for the purpose of celebrating the 10th year anniversary.

Designer, NUS Students' Computing Club   **Oct 2021 - Present**

- Conceptualized a new lineup of Computing Merchandise using Adobe Photoshop and Illustrator.
- Conducted survey on a small group to gather feedback pertaining to the designs.

Peer Mentor, USP Mentorship Programme   **Aug 2021 - Present**

- Communicated academic and curriculum matters to 2 USP Freshmen who were under my care to help them ease into university life.
- Assessed their study plans and provided feedback on how to structure their academic journey in Singapore.

Vice House Captain, University Scholar's Club   **Sep 2020 - Aug 2021**

- Collaborated with 3 other members in a committee that organized and facilitate cohesion events for members in the same house system.
- Facilitated freshman orientation activities which were conducted through Zoom and improved social bonding between the freshmen.