

Bryan LU We Zhern

Mobile No.: +65 8892 3769, Email: bryanlu.my@gmail.com

Website: <https://bryanlu.me/>, LinkedIn: <https://www.linkedin.com/in/bryanluwz/>

EDUCATION

Nanyang Technological University, Singapore

Aug 2021 – Jul 2025

Bachelor of Engineering (Computer Engineering)

- Dean's List for Academic Year 2021/2022 and 2023/2024, ASEAN Scholar
- Expected Honours (Highest Distinction), Current CGPA: 4.66 / 5.0

SKILLS

- **Frontend Development:** ReactJS, HTML, CSS, SASS, LESS, Javascript, Typescript, Vue, ECharts, Ant Design
- **Backend Development:** Python, Flask, NodeJS, ExpressJS, C, C++, Java, SQLite
- **DevOps & CI/CD:** Git, Docker, Kubernetes, Jenkins, GitHub Actions, AWS
- **AI & Machine Learning:** PyTorch, Huggingface, transformers, Tensorflow, scikit-learn
- **Others:** Embedded C Programming, Bash, Verilog
- **Languages:** Fluent in English & Chinese, Intermediate in Malay, Beginner in Japanese
- **Soft Skills:** Keen to learn, adaptable, resilient, strong problem-solving, collaboration, and communication skills

WORK EXPERIENCE

Univers Pte. Ltd.

Jan 2024 – Jun 2024

Frontend Software Engineer Intern

- Developed reusable components and refactored codebases using HTML, CSS, SASS, LESS, ReactJS, and TypeScript, in conjunction with public libraries such as Ant Design and Apache ECharts
- Worked independently on assigned task within a distributed team, and collaborated with the team for bug tracking and work allocation using JIRA in an agile work environment
- Deployed developed webpages to pre-production environment using Jenkins, Docker, Kubernetes and in-house development portal

ACADEMIC PROJECTS

Nanyang Technological University, Singapore

Aug 2024 – May 2025

Full Stack Web Application Development of Chatbot – Final Year Project

- Developed a full stack chatbot web application using ReactJS for the frontend and NodeJS, ExpressJS for the backend, ensuring a seamless user experience
- Built a robust chatbot AI engine with Python Flask, leveraging Hugging Face libraries and pre-trained models such as LLMs for natural language understanding, response generation, and contextual awareness
- Built Docker images for AWS deployment, allowing for seamless scaling, efficient resource utilisation, and streamlined CI/CD integration
- Implemented secure RESTful APIs to integrate AI functionalities, ensuring data protection and efficient request handling
- Optimised performance and scalability through efficient database management and server-side caching strategies

Nanyang Technological University, Singapore

Jan 2023 – Apr 2023

Frontend Web Application Development for Restaurants Recommendation

- Coded a web application using HTML, CSS and ReactJS to gather information for over 100 restaurants; implemented web-based application to search for restaurants
- Integrated web application with MongoDB backend API, ensuring smooth user experience and efficient resource usage
- Oversaw project's development efforts to meet scheduled deadlines ensuring project be delivered more than 1 week on-time; contributed up to 40% of the entire group effort

Nanyang Technological University, Singapore

Embedded Program Development for Autonomous Robot Car Navigation

Aug 2023 – Nov 2023

- Designed Embedded C programs for controlling STM32 Microcontroller behaviour using FreeRTOS ensuring efficient RAM and flash storage usage and responsive performance
- Integrated STM32 Microcontroller with Raspberry Pi, utilising serial communications to achieve autonomous and efficient navigation of obstacle course
- Debugged Python code for computer vision and pathfinding algorithm on Raspberry Pi, ensuring optimum performance

PERSONAL PROJECT

Personal Website Deployed using GitHub Pages

May 2023 – Jul 2023

- Developed a website using HTML, CSS, ReactJS and various assets, hosted on GitHub Pages
- Coded various minigames and tools, gathered personal GitHub repositories information using GitHub's API, display it on website using customised view

08 October 2024

To Whom It May Concern

Eligibility for Employment Pass

1 Bryan Lu We Zhern (G3707266X) will be graduating from the Nanyang Technological University, Singapore and has a Ministry of Education bond obligation to serve in Singapore.

2 This letter serves to inform you that the Singapore government will exercise flexibility in the assessment of the Employment Pass application of Bryan Lu We Zhern. You should also use the Self-Assessment Tool on the Ministry of Manpower's website for an indicative assessment on whether the applicant qualifies for an Employment pass. If your company finds this graduate suitable for a position and makes an Employment Pass application to the Ministry of Manpower (MOM), the necessary work pass arrangements will be facilitated after receiving your submitted application. This is subject to the qualifying notes overleaf (as attached), which includes complying with the Fair Consideration Framework.

3 This letter is supported by the Ministry of Manpower and is valid for 12 months from the date of graduation or date of issue, whichever is later.

4 You may email us at careeraxis@ntu.edu.sg for clarification.

Thank you.

Yours sincerely,



Loh Pui Wah

Director

Qualifying notes:

- 1 The applicant named overleaf is eligible to apply for an Employment Pass if he/she:
 - (a) secures full-time employment in a company of good standing in Singapore
 - (b) is to be engaged in managerial, executive or specialised job;
 - (c) submits an application for Employment Pass together with certified copies of educational certificates;
 - (d) is not on Government agencies' adverse record.

- 2 Professionals such as doctors, lawyers, architects, dentists, pharmacists etc. have to register with the relevant professional regulatory body before they are allowed to practise their profession in Singapore. Those who intend to practise their profession would have to seek registration before the Employment Pass is issued.

- 3 This letter does not exempt employers from the Fair Consideration Framework. This includes the requirement to advertise the job vacancies on the National Jobs Bank before submitting an Employment Pass application. Employers should consider all applicants fairly, regardless of nationality.