

Bey Hao Yun

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Summary

Robotics Engineer with **6+ years of experience** in ROS 1 and ROS 2 with specialisation in **Computer Vision, Robot-Lift Integration** as well as **Heterogenous Robotic Fleet Management**. Strong background in building, maintaining scalable systems and managing multi-disciplinary project stakeholders.

Experiences

Kabam Robotics

Robotics Engineer

Singapore

May 2024–Present

- **Open-RMF, Robot-Lift Integration Specialist:** Served as Principal Developer, prototyping, testing and maintaining live deployments of lift-taking and RMF-related products in Kabam Robotics, involving a wide variety of 3rd-party robotic and infrastructural components.
 - Integrated with lifts from **KONE, OTIS, Schindler, Hitachi, Gylet** and **Mitsubishi**.
 - Integrated with robots such as Kabam Robotic's **Co-Lab** and LionsBot's **R3 Scrub**.
- **Engineering Documentation Specialist:** Restructured and standardised existing in-house instructional dossiers for easier developer-centric access to improve robotic field servicing.
- **Event Speaker/Exhibitor:** Represented the company to showcase visual demonstrations highlighting new capabilities and features available at events like ROS-Industrial Symposium 2024 as well as RoboSG 2025.
- **Open-Source Contributor:** Contributed to developmental work within the wider ROS community on GitHub by helping to debug and improve the following Open-RMF repositories:
 - Developed, tested and maintained **RMF Fleet Adapters**.
 - Debugged long-standing issues on **RMF Core Libraries**.

ROS-Industrial Consortium Asia Pacific (ROSI-AP)

Software Engineer

Singapore

July 2019 – June 2022

- **Advanced Perception:** Served as acting Technical Lead, spearheading the development of a Computer Vision (CV)-enabling ROS 2 module to increase adoption of robotic solutions in Singapore under the National Robotics Programme. Click here for more details.
 - Worked with manipulators from **ABB** and **Universal Robots**.
 - Worked with depth cameras like **Ensenso, ZED Camera** and **Realsense**.
- **Bio Rapid Automated Valence Engineer (BRAVE):** Served as technical aide by providing simulation work for robotic manipulator trajectory planning and conducted testings to verify suitable sensors for detecting translucent biological substances. Click here for more details.
- **Lead Trainer:** Headed ROSI-AP's training programme as an Advanced Certificate in Learning and Performance (ACLP)-certified trainer. Conducted ROS Boot Camp 2020 and 2021 at Singapore Polytechnic as lead trainer. Served as main trainer for ROS-Industrial Developer's Training (Asia Pacific) since 2020.
- **Health, Safety and Environment Champion:** Served as the company's BizSafe-Level 2 certified personnel in Risk Management for hazardous equipment and process handling.
- **Version-Control Manager:** Served as ROSI-AP's Consortium representative GitHub owner and manager. Reviewed pull requests for public ros-industrial GitHub repositories on ad-hoc and event basis. Maintained ROSI-AP's internal GitLab Organisation's codebases.
- **Safety Management Office (SMO):** Enforced Covid-19 prevention rules to prevent cluster formations within the worksite. Condensed fluctuating guidelines into bite-sized intuitive rules for existing and incoming team members with timely reminders.
- **Open-Source Contributor:** Contributed to developmental work within the wider ROS-Industrial community on GitHub by helping to drive the following open-source ROS packages:
 - Steering **ROS2 driver development** for Ensenso Camera.
 - Debugging **ZED Camera** for ROS 2 users.
 - Debugged **issues** on both deprecated and official ROS 2 drivers of Realsense.

Education

National University of Singapore

Bachelor of Computer Engineering

Aug 2015 – Jun 2019

Projects

Open Source: Contributor to the following repositories:

- **easy_perception_deployment:** A ROS 2 package that accelerates the training and deployment of Computer Vision (CV) models for industries. The module is currently being incorporated into local industrial applications, adhering to strict quality assurance guidelines.
- **rosbag2video:** A Python-based utility that converts ROS 1/ROS 2 image-publishing rosbags or streams of recorded visual data into a .mp4 video file for ease of debugging.

Skills

Languages: Python, C++, Rust, Java, Markdown, Bash, Batch

Cloud: AWS

DevOps: Docker, Podman, CI/CD (GitHub Actions, Jenkins, Travis)

Other: Linux, Git, REST APIs, Unity

Languages Skills

English (Fluent), Mandarin

Interests

Illustration, Volunteerism, Teaching, Scientific Communication