

# LIM XIN RU

## Post-SPM Internship

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**Address:** Bayan Lepas, Penang, Malaysia

**Languages:** English | Mandarin | Malay

Highly motivated Form 5 student with strong hands-on experience in robotics, programming, and game development. Proven leadership in national and international STEM competitions, with a passion for engineering, software development, and problem-solving.

## EDUCATION

2021-2025 SMJK Heng Ee Cawangan Bayan Baru

## TECHNICAL SKILLS

**Programming:** Python, Java, HTML/CSS/JavaScript, Scratch, Godot Engine

**Robotics:** FTC robot build & autonomous programming & encoder navigation path

**Design & Tools:** Onshape CAD, VS Code, GitHub, 3D Printer, Laser Cutter, Micro:bit, Canva

**GitHub:** <https://github.com/dreamtraveller1314>

## ACHIEVEMENTS

-FIRST Tech Challenge Malaysia 2024–2025 (Team Absolute Hack): Inspire Award (1st), Think Award (2nd), Innovate Award, Alliance Captain

-Represent Malaysia to First Championship 2025 in Texas, USA

-Represent Malaysia to Guangxi, China, 7th Belt and Road Maker Camp – Best Team

-Chinese Orchestra Student Conductor & Zhonghu Section Leader (2021–2025)

-School Prefect Board Unit Leader

-Best Co-Curricular Achievement Award 2025

## VOLUNTEERING

-Penang International Science Fair (PISF) 2023–2024 – Exhibitor & Volunteer

-Daydream Penang (International Teen Game Jam) – Co-organiser

-STEM outreach & booth demonstrations experience

## **EXPERIENCE**

### **Work Experience**

- Internship at Cytron Technologies
  - Worked on new robotics products (idea → user stage)
  - Create Quick Start Guide + Resources Hub
  - Produced 19 tutorial videos in 2 weeks
- Robotics Instructor (Assassin Robotics) (mentioned)
  - Teaching students aged 7–12
  - coding + hardware (LEGO SPIKE)

### **Marketing / Getting People to Show Up**

- Co-organized Daydream Penang
  - Designed posters + prospectus (for sponsorship)
  - Connect and Collaborated with local STEM org (PSC) for promotion
  - Reached out to participants → achieved 100% project completion rate
  - Get sponsorship 1k for the prize
- FTC outreach events
  - Organized school + community exhibitions
  - Raised RM5000 (school event) + RM2000 (community event)
- Penang International Science Fair
  - Event scale: 100,000+ attendees
  - Recruited 12 volunteers from school
  - Helped coordinate 100+ volunteers overall

### **Shipping Software Projects**

- Completed 70+ hours of projects in Hack Club Athena
- Built multiple projects using:
  - Godot (game development)
  - Web development
  - Minecraft modding

### **Shipping Hardware / Electronics Projects**

- FIRST Tech Challenge (FTC)
  - Role: Programming Lead
  - Built and integrated robot systems
  - Competed internationally → reached World Championship (Houston, 2025)

## Design / Illustration

- CAD Design (Onshape)
  - Created multiple robot components + designs
- FTC Branding & Merch
  - Designed:
    - Team shirts, jackets, badges
    - Custom poker cards (sell for fundraising)
    - Pit booth design
- Daydream Event Design
  - Designed posters + promotional materials
  - Orchestra concert branding (tickets, promo book, visuals)

## Organizing Logistically Difficult Things

- Chinese Orchestra Concert (Conductor + One of the Head Organizer)
  - Managed 150+ performers
  - Organized concerts with 400+ audience
  - Led for 4 years
  - Planned:
    - performance structure
    - logistics (tickets, food, coordination, connect)
- Daydream Penang (mentioned)
  - Achieved 100% completion rate
- Penang International Science Fair
  - Helped coordinate 100+ volunteers
- FTC Team (Founder)
  - Built team from 0 → full team
  - Organized:
    - workshops
    - outreach events across 10+ countries
  - Raised RM10,000+ funding from local companies

## Helping People Learn

- Robotics Instructor (Assassin Robotics)
  - Teaching students aged 7–12
  - Covers:
    - coding + hardware (LEGO SPIKE)
- FTC Mentorship
  - Mentored FLL teams
  - Ran robotics workshops for students
  - Mentored new FTC member as the FTC alumni (they won a chance to proceed to world this year too)
- Science Fair Booth Volunteer
  - Taught public hands-on:
    - micro:bit coding
    - beginner STEM interaction

## SELECTED PROJECTS

FIRST Tech Challenge Malaysia Championship (2024–2025) – Programming Sub-Team Leader

Developed autonomous routines achieving 63 points in 30 seconds.

Represented Malaysia at FIRST World Championship 2025 (Texas, USA).

Match Video:

[https://drive.google.com/file/d/1SuLN-XCtBMETRn\\_qsCHXv-fnzuAgq0RP/view](https://drive.google.com/file/d/1SuLN-XCtBMETRn_qsCHXv-fnzuAgq0RP/view)

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Castle of Shadows – Godot Engine (2025)

Solo-developed 2D pixel-art adventure game with mental health awareness theme.

<https://dreamtraveller1314.itch.io/castle-of-shadows>

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Custom Computer Mouse – Onshape CAD (2025)

Designed ergonomic mouse shell compatible with Bambu Lab Mouse Kit.

<https://cad.onshape.com/documents/89a440595dc51c5ae372007d>

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Snake and Ladder — Scratch Project (2021)

Created an interactive web-playable game. Integrated language learning elements for educational use

<https://scratch.mit.edu/projects/543620844/>