

# Ileana Pal

## EDUCATION

**The Hong Kong Polytechnic University, Hong Kong — BEng (Hons) in Mechanical Engineering, Year 3**

Minor in Computing

September 2021 - PRESENT

- CGPA: 4.01 W GPA: 4.12
- Perceptual Robotics (A+); Heat and Mass Transfer (A+); Linear Systems and Control (A+); Numerical Methods (A+); Object Oriented Programming (A)

## EXPERIENCE

**Mechanical Engineering Summer Intern, CLP Holdings**

July 2024 - August 2024

- Contributed to three key projects in the Development and Asset Management team. Understood and applied the engineering principles needed for asset management of industrial power plants and renewable energy plants

**Undergraduate Research and Innovation Scheme, Hong Kong**

September 2023 - September 2024

- Specializing in localizing UAVs using AI IMU Dead Reckoning and accumulated error correction using machine learning and inertial navigation aided by stationary updates.

**SureFire Research, Hong Kong — Student Assistant**

March 2023 - August 2023

- Developing a new age AI reconnaissance system using Unmanned Aerial Vehicles to aid in fighting large-scale fires in indoor environments.

## EXTRA-CURRICULAR ACTIVITIES AND PROJECTS

**Building a liquid-fuel autonomous landing rocket to deliver a payload, HK PolyU — Final Year Project**

September 2024 - Present

- Working in a group of 3 to apply engineering principles to build a rocket that delivers a payload and lands autonomously.
- Build prototypes, conduct tests and optimize features to attain the desired functions.

**Google Developer's Student Club, HK PolyU — Vice President**

September 2023 - Present

- Lead a team of 13 individuals to accomplish the goals set by Google. Increase technological capability of PolyU students through activities and workshops.

**PolyU Team Leader @ 2023-24 Hong Kong Academy of Engineering Sciences Competition on Grand Challenge Engineering Topics**

November 2023 - April 2024

- Lead a team of 6 individuals to ideate and develop EcoFlight, an AI empowered software to optimize airplane taxi routes and increase efficiency at major airports across the world, thereby reducing CO2 emissions in aviation.
- Won the competition against representative teams of top 5 HK universities.

**Engineering Summer Programme, The University of Cambridge**

July 2023 - December 2023

- Attended a rigorous engineering training with minimum 45 hrs of contact time over 4 weeks.
- Learnt about: The Jet Engine, Nanotechnology and Quantum Technologies.

**International Student Association, HK PolyU — President**

May 2020 - December 2021

- Lead a team of 9 to promote integration of the community on campus.

**Student Development and Affairs Committee, HK PolyU — Student Representative**

November 2022 - October 2023

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## SKILLS

C++; Java; Arduino; SQL; MATLAB; SolidWorks; AutoCAD; Ubuntu Linux; Git; Circuit Analysis; Linear systems and Numerical Methods; Manufacturing Processes

## AWARDS

**Outstanding Student Award**

- Mechanical Engineering

Awarded annually to one final-year student in the department

**CLP Scholarship 2024**

Received a scholarship of HK\$20000 for

demonstration of strong engineering capabilities

**2023-24 HKAES**

**Competition on Grand**

**Challenge Engineering**

**Topics Winner -**

Won against representative teams of 6 Hong Kong Universities (HK\$50000)

**The IET Prize 2023 -**

Awarded to one student from PolyU for demonstration of excellent engineering skills

**The Presidential Student**

**Leadership Award of**

**Department -**

Awarded to one student from the Mechanical Engineering department for exemplary academic and non-academic performance

**Full Entry Scholarship -**

**Academic**

Awarded 140% Scholarship

at The Hong Kong

Polytechnic University

## LANGUAGES

**English — First Language**

**Hindi — Fluent**

**Bengali — Fluent**

**French — Delf B1; received 7 in French-B SL in the IB DP course**