Portfolio

Steven Ye

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About Me

2025/6/16

EDUCATION
Imperial College London
- Master of Design Engineering

PUBLICATION
Lightweight Open-Vocabulary
Ð Pose Estimation — EA AI,
2024

SKILLS

Technical Skills
Robotics, Computer Vision, ROS,
Python, C++, JavaScript,
MATLAB, Arduino IDE, OOP

Design & Tools
Fusion 360, InDesign,
Photoshop, Audition, Video

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Nature Kit

In the digital age, children are increasingly immersed in the virtual world, losing their exploration and curiosity about the real world. Natural Kit is dedicated to changing this situation, helping children rediscover, observe, and understand the world around them.

Explore.

Capture.

Understand.

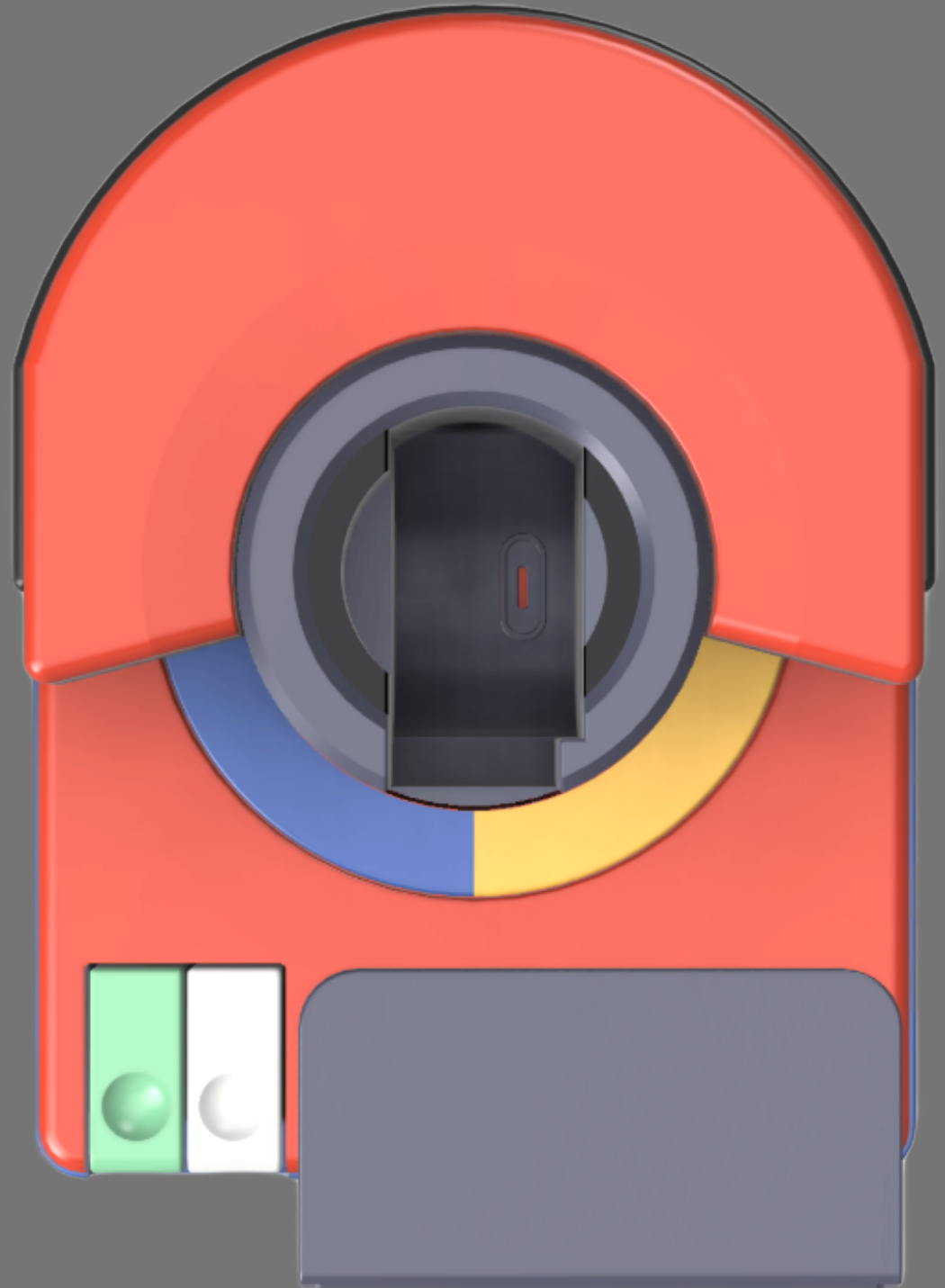## Skill-set

JavaScript

Python

CAD
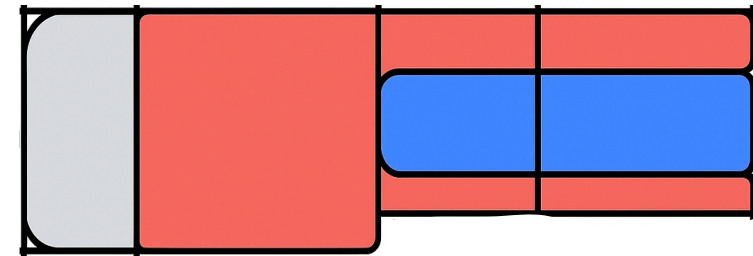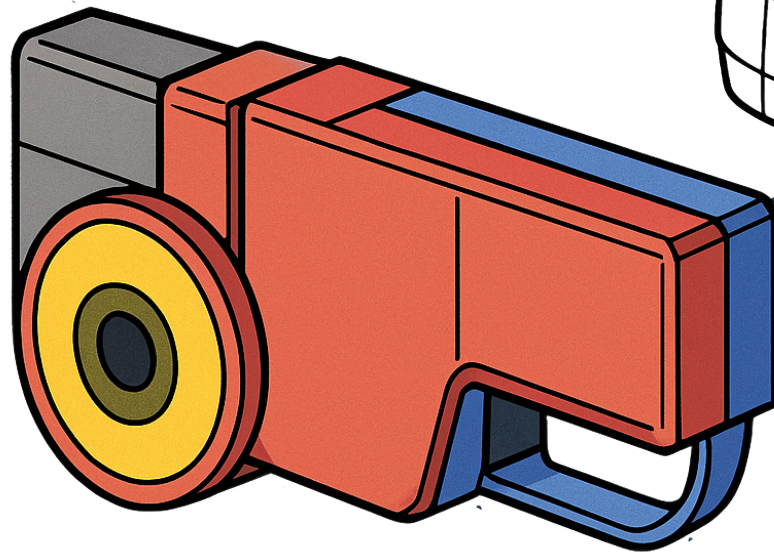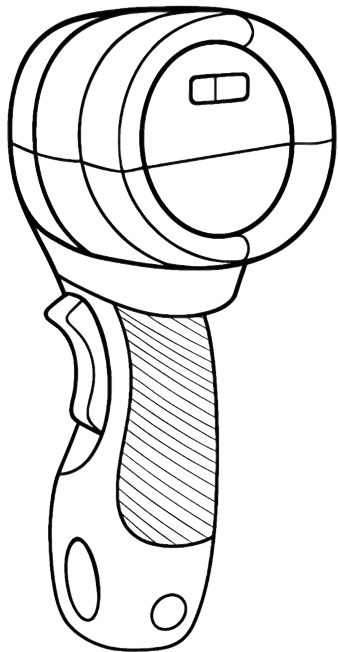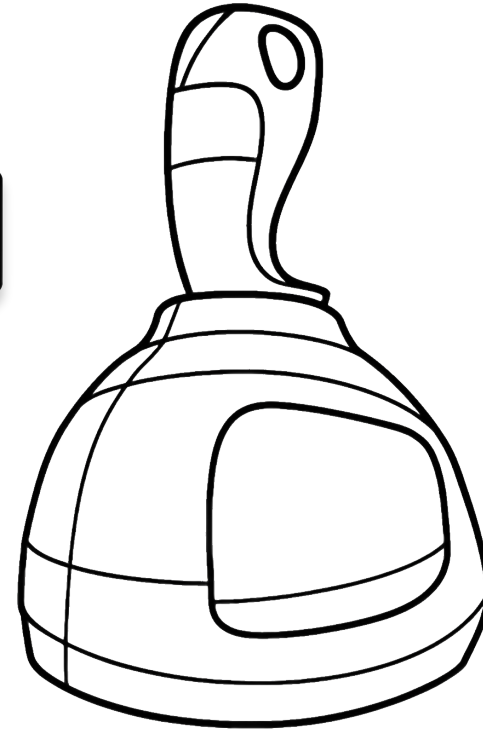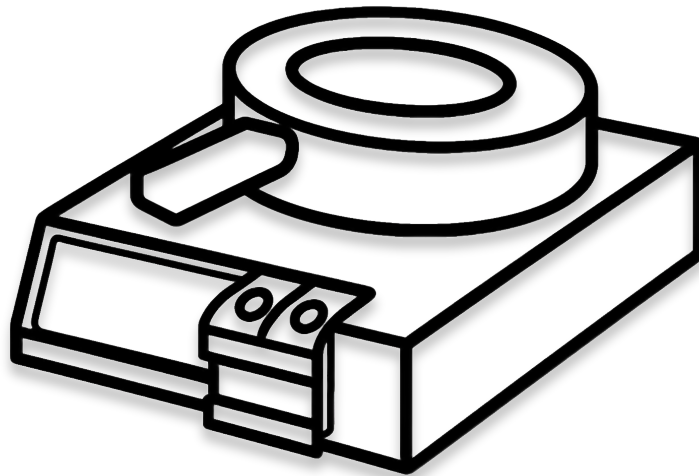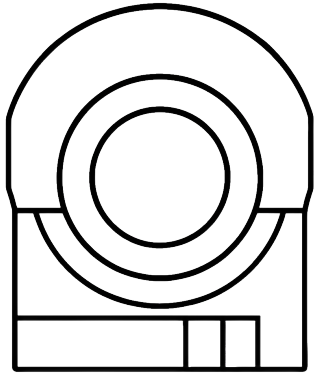
SSL

Flask

Ubuntu

Mulit Threading

API Integration
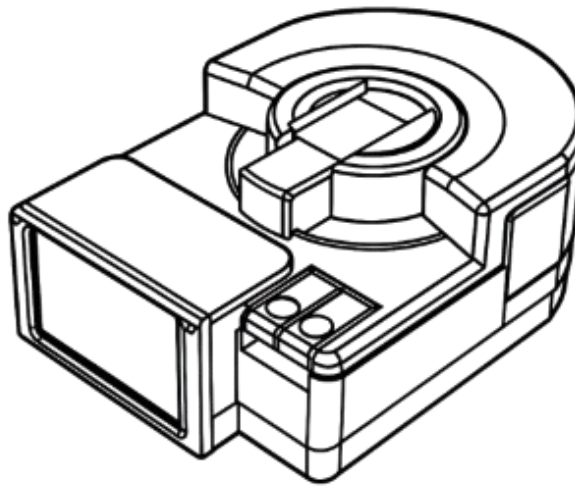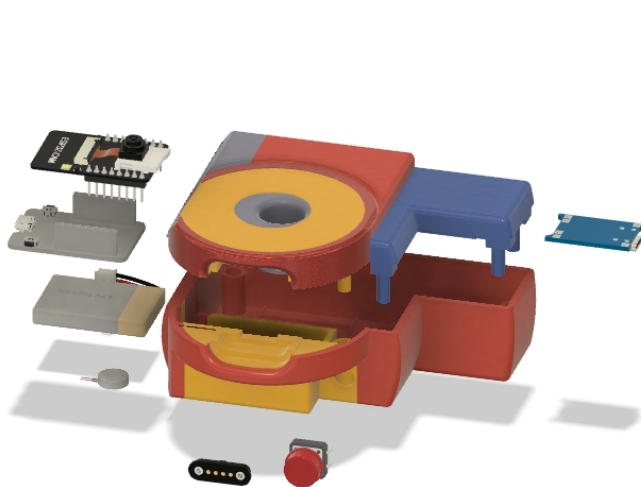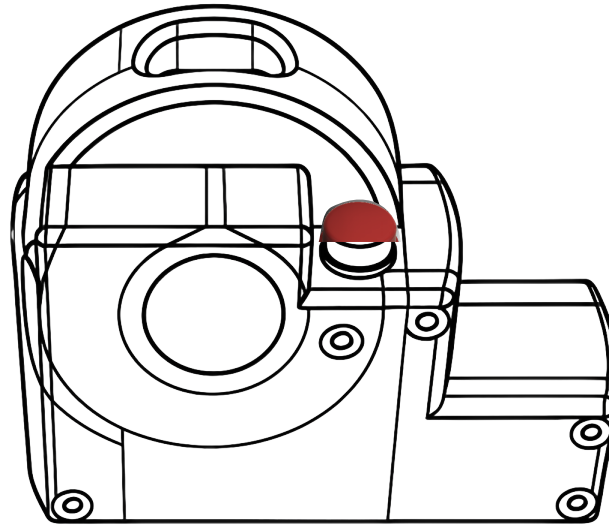
Prompt Design

HTML

Ideation

CAD

We encourage children to capture nature and life through the lens, collect photographs, and organise stories, turning scattered discoveries into vivid exploration diaries. Through hands-on practice and interactive learning, children can not only develop their observational skills and creativity but also establish a genuine connection with the world.

Pourfect

Mechanical System Design

In many kitchens, dispensing sauces and seasonings remains inefficient, inconsistent, and often inaccessible for all users, especially old people. *Pourfect*'s hardware system reimagines this daily interaction, offering a solution that is more intuitive, reliable, and inclusive. Through thoughtful mechanical design, it brings precision and control back to the hands of the user—making everyday cooking both smarter and simpler.

Skill-set

| CAD | C++ | Mechanical Design | Co - Design |

| Design for Assembly | Validation & Testing |

| Human Factors |

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Pourfect

Digital Application

Pourfect also has a mobile app designed to help users monitor, manage, and reflect on their liquid ingredient usage—particularly oils, sauces, and other high-impact culinary fluids.
Through intelligent image scanning and recipe analysis, users receive clear visual feedback on their intake and weekly usage. The app supports file imports, real-time scanning, and public recipe sharing to foster healthy, informed cooking routines.

1.3K+ recipes analysed

200+ personalized reports generated

6 functional modules

98% detection accuracy

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Sustainable Aircraft Seat

Better Industrial Solution

Redefining eco-efficiency with FEA-driven topology optimisation. We replace traditional backplates with ultra-lightweight mesh structures, using material science to cut weight by 40% while maintaining strength. Smarter design, lower fuel burn, true circularity.

| CAD | FEA | Performance Testing | Validate |

| Computational Design | Aviation Compliance |

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