# TAKESHI KOEY

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#### **EDUCATION**

### **Carnegie Mellon University**

Pittsburgh, PA

Bachelor of Science in Information Systems, Dean's List

May 2028

Relevant Classes: Fundamentals of Programming and Computer Science, Principles of Imperative Programming

### **Anglo-Chinese School (Independent)**

Singapore

International Baccalaureate (IB): 43/45

November 2021

#### **EXPERIENCE**

## Plants Vs Zombies Project, Carnegie Mellon University

Pittsburgh, PA

Developer

November 2023 - December 2023

- Designed and built a functional Plants vs. Zombies game leveraging Python and object-oriented programming, featuring grid-based planting and zombie wave mechanics
- Developed an autoplay system with real-time decision-making algorithms to predict zombie spawns, manage resources, and plant units strategically
- Integrated advanced features like gravity effects, auto-play with decision-making, and resource management systems

## Sports Strategy Analytics, National University of Singapore

Singapore

Research Assistant

June 2023 - August 2023

- Automated video segmentation using Python and the PySceneDetect library, reducing manual effort in tennis match analysis
- Processed video clips using the Pandas library to create structured datasets for efficient data organization
- Generated CSV files of segmented clips, improving data accessibility for downstream analysis by research team

# BrainHack Hackathon, Defence Science and Technology Agency

Singapore

**Finalist** 

June 2023 - June 2023

- Team developed an e-commerce mobile application using React, React Native, and JavaScript, featuring user profiles, search, item display, shopping cart, and checkout functionalities
- Earned the "Most Human-centric Design Runner-up", for delivering an intuitive and user-friendly application

### **SKILLS**

Technical Skills: Python, React, Figma, JavaScript, Microsoft Office, Word, Excel, PowerPoint

### **LEADERSHIP & ACTIVITIES**

# **Carnegie Mellon University**

Pittsburgh, PA

Varsity Tennis Player

August 2024 - Present

• Competing in the NCAA alongside teammates from various backgrounds

Lend-A-Paw Singapore

Co-founder April 2022 - March 2023

- Vending machine business in partnership with the Society for the Prevention of Cruelty to Animals (SPCA)
- Raised \$4,000 in 7 months for the SPCA

#### **Anglo-Chinese School (Independent)**

Singapore

Varsity Tennis Captain

January 2020 - November 2021

- Organized online School Tennis Open House; Spearheaded online workout sessions during the Covid-19 lockdown to improve camaraderie between team members
- Led high school team to the Singapore National School Games Title

#### HONORS AND AWARDS

# Dean's List, Carnegie Mellon University

Pittsburgh, PA

• Information Systems Program Dean's List (GPA 3.75+)

August 2024 – December 2024