

**CUHK Convocation Outstanding Services
and Creativity Student Awards 2021/22**
香港中文大學校友評議會傑出服務及創意學生獎 2021/22

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Major 主修	Computer Science

I am honored to be awarded the CUHK Convocation Outstanding Services and Creativity Student Awards 2021/22. I would like to express my sincere gratitude to the CUHK Convocation for granting me this award.

Robocon 2021

I joined CUHK Robocon Team in the Robocon 2021. During the whole year, our team was required to design two robots: The throwing Robot and Defense Robot (the Arrow kid robot in the ABU robocon). These robots aim to perform tasks such as arrow gripping, shifting, lifting, and throwing in the competition. It is the first time for me to design a robot and build them from the beginning. Nothing is perfect, and so as our robots. To improve our robots, our team has gone through different kinds of testing and editing to find out and correct mistakes that we have made previously. With our hard work and creativity, our team won the Hong Kong 2021 Robocon competition among the 13 teams, representing Hong Kong and taking part in the ABU Robocon competition.

Laser Sensor in the Arrow kid Robot

In the ABU Robocon Competition, the shooter's accuracy is critical to the match result. Therefore, we have adopted a laser sensor for our arrow kid robot. The main objective of this idea is to obtain the distance between the robot and the pot, which is more accurate by watching from the human eye. We use the pneumatic cylinder and electrical proportional regulator for shooting the arrow. The electrical proportional regulator controls the air pressure passing into the pneumatic cylinder, which can adjust the shooting distance and the landing performance of the arrows. With the aid of the sensor, we could adjust the value of the electrical proportional regulator, changing the shooting distance with higher accuracy and obtaining a better performance during the match.

Once again, I would like to express my sincere gratitude to CUHK Convocation for the award. I will cherish this opportunity and further work on robotics technology in the future.



This photo was taken during a post competition exhibition (I am the 2nd right)



Our team photo in the Robocon 2021 (I am in the middle)