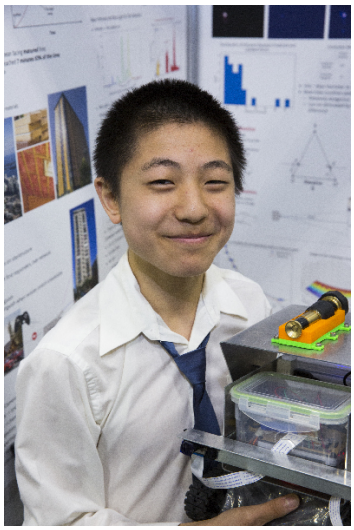
CWSF 2019 - Fredericton, New Brunswick



Wei Xie

FireBot: Augmenting Firefighting with AI

Challenge: Innovation
Category: Intermediate
Region: Greater Vancouver
City: Vancouver, BC
School: Eric Hamber Secondary
Abstract: Fires grow fast, especially with the rise of synthetic materials and high-rises. Current response times allow fires to mature, seriously threatening victims and firefighters. A novel solution aimed at killing fires in their infancy is developed, a firefighting robot intended to reside on-site, detect fire visually, communicate with and stream video to firefighters and extinguish via remote control or autonomously.

Biography

I'm Wei Xie and I hope to give back to my community and the world around me through technology. I organized a few fundraising yardsales for the BC Children's Hospital, an important member in my community. I have always been intrigued by the immense impact a single innovation can have. I believe climate change is one of the largest, most complex and most pressing problems humans have ever faced. Last year, wildfires scorched many parts of the world, including Sweden and BC, where I currently live. I was inspired to learn more about fires and realised that structural fires compose a large portion of fires. Interested in robotics and automation, I ended up building a firefighting robot. I hope to apply the numerous new skills and experience I gained to make current processes in various fields more sustainable. Some topics I am interested in include urban agriculture, public transportation and renewable energy. To any students considering pursuing a project, I would like to congratulate them on making the first step. I believe the most important part of any project is to identify an issue personally important to you, with real implications.

Awards	Value
Excellence Award - Intermediate - Bronze Medal Sponsor: Youth Science Canada	
Western University Scholarship Bronze Medallist - $1000 Entrance Scholarship Sponsor: Western University	$1 000
Total	$1 000