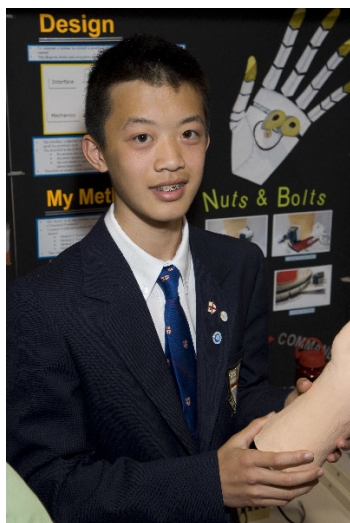


CWSF 2008 - Ottawa, Ontario



Alex Yang

X-CoP 101 - "eXternal COntrolled Prosthesis"

Division: Health Sciences / Environmental Innovation

Category: Junior

Region: Greater Vancouver

City: Vancouver, BC

School: St George's School

Abstract: Robotic technology becomes essential with prosthetic limbs, aiding millions of amputees. My aim was to introduce another method of controlling prostheses. After innovating an interface utilizing external sensors, I compared it to the EMG system-currently the most advanced interface available. My system of control proved feasible and effective. This innovation could influence a wider field of biomechanics, aiding victims of various illnesses and accidents.

Biography

"Expect nothing. Live frugally on surprises"-Alice Walker. I base this quote on every aspect of my daily life in order to succeed. My name is Alex and I'm in Grade 7 at St. George's School, one of the best private schools in Canada. It's a privilege to be the Head Boy of the Junior School, which keeps me busy every day. At school, I am involved in sports such as basketball, soccer, rugby, and track. One of my many notable achievements with the school team is a national basketball championship in Ottawa this past February. Extra-curricular activities I am involved in are Model UN, public speaking, fundraising, and many more. I created a group to help fundraise for Free The Children, an organization started by youths. I am a person that is interested in hands-on activities and am very keen to learn kinesthetically. Some of the many subjects I'm interested in are Chemistry and Math. I'm sure this national science fair will be a stunning experience for me.

Awards

Value

The University of Western Ontario Scholarship Silver Medallist - \$1500 Entrance Scholarship Sponsor: University of Western Ontario	\$1 500
Honourable Mention - Environmental Innovation - Junior Sponsor: EnviroExpo, Presented by VIA Rail Canada	\$100
Silver Medal - Engineering - Junior Sponsor: Youth Science Foundation Canada	\$700
Total	\$2 300