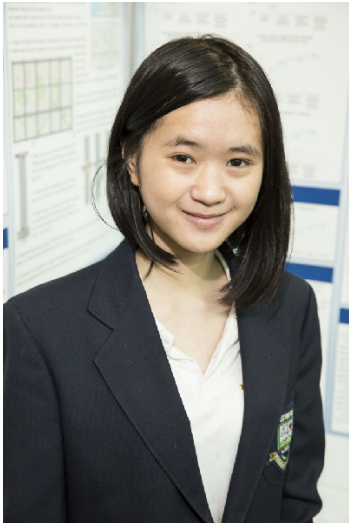


# CWSF 2015 - Fredericton, New Brunswick



## Chloe Chen

### Smart Speed & Smart Intersection

**Challenge:** Innovation

**Category:** Intermediate

**Region:** Greater Vancouver

**City:** Vancouver, BC

**School:** West Point Grey Academy

**Abstract:** Intersections are the main bottleneck in traffic. I developed two systems to alleviate traffic congestion by targeting intersections: Smart Speed, a method that congregates vehicles into groups to avoid stopping at red-lights, and Smart Intersection, a modified version of CFI that utilizes minor roadways to redirect turning vehicles. I tested these ideas via simulations, finding over 50% maximum increase in average speed and traffic flow.

#### Biography

Hi! My name is Chloe Chen, and I'm in grade 9 at West Point Grey Academy. This is my second year at CWSF, and I'm super excited. I've always had a passion for computer sciences and electrical engineering, though I enjoy looking into other areas of science as well (I've recently been studying astronomy, which is really cool). I'm in my school's robotics team, DI team, debate team, choir, and orchestra. I also dance and play piano & violin. In my spare time, I enjoy painting, singing, dancing-- basically whatever pops into mind. And yes, I adore doing science as well...I'll often spend hours and hours on my computer digging into whatever science topics that interest me at the moment, formulating my own theories that almost always get proven wrong at the next paper I read :). I haven't really decided on what I want to be when I'm older, but I'm sure it will be somewhere along the lines of science or engineering.

#### Awards

#### Value

Excellence Award - Intermediate - Silver Medal Sponsor: Youth Science Canada	
Western University Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: Western University	\$2 000
Total	\$2 000