

# CWSF 2010 - Peterborough, Ontario



## Sandro Young

### Avatouch: A 3D Computing User Interface

**Division:** Engineering & Computing Sciences

**Category:** Intermediate

**Region:** Ottawa

**City:** Ottawa, ON

**School:** Lisgar C.I.

**Abstract:** A novel computer interface experience is created. Red-cyan 3D imaging gives the impression that objects are located in front of the computer screen. The display adjusts in real time in response to head movements, making the 3D experience extremely realistic. The user's hands are tagged with infrared dots, which are tracked in 3D space, allowing the user to interact with the 3D environment.

### Biography

My name is Sandro Young, and I am in grade ten at Lisgar Collegiate Institute. I am interested in math, science, electronics, and computing. I participated in the Science Fair last year as well, with my partner Justin LI. In Ottawa, we were awarded best in fair, and we came second in our category at Nationals. I recently participated in the Cayley math contest, and came second in my school. I experiment with electronics and write computer programs in my free time. My team recently came first in the regional ECOO computer contest, and is currently in first place for the monthly DWITE contest. I play piano at the Grade 9 level. I enjoy skiing (both cross country and downhill), swimming, cycling, and paddling. I am an avid reader, and I love to travel.

### Awards

### Value

|   |                 |
|---|-----------------|
| Australian National Youth Science Forum Award   | \$2 500         |
| The University of Western Ontario Scholarship<br>Gold Medallist - \$4000 Entrance Scholarship<br>Sponsor: University of Western Ontario | \$4 000         |
| Gold Medal - Computing & Information Technology - Intermediate<br>Sponsor: Intel of Canada, Ltd.  | \$1 500         |
| EnCana Platinum Award - Best Intermediate Project<br>Sponsor: Encana Corporation  | \$5 000         |
| <b>Total</b>  | <b>\$13 000</b> |