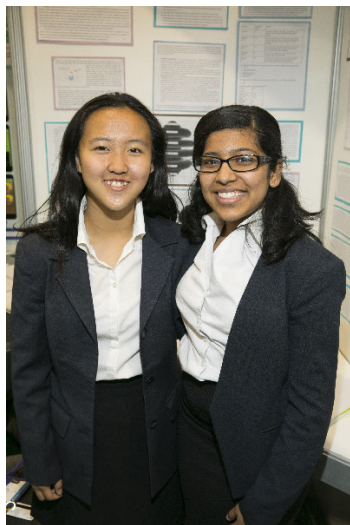


# CWSF 2017 - Regina, Saskatchewan



## Stuti Sharma, Cheryl Chen

### Charma 2.0 ? An Orbital Settlement

**Challenge:** Innovation

**Category:** Junior

**Region:** South Fraser

**City:** Surrey, BC, Burnaby, BC

**School:** Hyland Elementary

**Abstract:** With rising predicaments, it is inevitable for humans to seek shelter beyond our terrestrial boundaries in order to prosper. Hence, Charma 2.0 was developed. It is a spacecraft designed to accommodate 10,000 individuals in the Low Earth Orbit while solving a crucial problem of space debris. It is envisioned to be built with technologies we have available today and excludes futuristic sci-fi equipment.

#### Biographies

Stuti - Greetings! My name is Stuti Sharma and I'm a grade 7 student in Surrey, BC. I have always had some sort of interest in STEM-related fields, especially the process of tinkering and creating something new, whether that be a new toy for my entertainment or now, a proposal for an orbital settlement! When I was introduced to space sciences, the idea of exploring the cosmos clung with me, and my partner and I wanted to find a way to get closer to the world around us. So, we decided to build a proposal for a space colony called Charma 2.0! As of yet, Charma 2.0 is just a research paper. However, I envision to enhance it and educate people more about...

Cheryl - Greetings! My name is Cheryl, and I'm from Vancouver, British Columbia. Here, I can travel to the ocean when I please, bury my toes in the freezing sand, dip my feet in the refreshing Pacific, and pretend I'm not fawning over the dogs playing fetch. It's one of my favorite things to experience these wonderful places and people, then write or speak about it afterwards. Mostly speak. I would invite everyone to get to know the West Coast, where I enjoy hiking, swimming, water polo, but also sleeping. Aside from the aforementioned activities, it's a heartfelt hobby of mine to yell into open spaces. Vast areas are my home, which led me to ...

#### Awards

#### Value

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