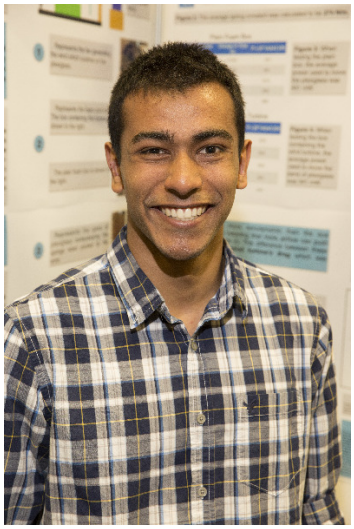
CWSF 2014 - Windsor, Ontario



Nolan Dey

Harnessing Wind Energy for Use in an Automobile

Challenge: Energy
Category: Senior
Region: Peel
City: Mississauga , ON
School: Mississauga S.S.

Abstract: This project explores the possibility of installing wind turbines inside a car's grille to generate power by converting a portion of the car's drag into usable energy. An experiment was designed to compare the drag of the turbine to its power output. The results from this project demonstrate that this a viable option to explore in future automotive designs.

Biography

My name is Nolan Dey, I am a Grade 12 student at Mississauga Secondary School in Mississauga, Ontario. My hobbies include wrestling, karate, dancing, and playing the bass in a rock band. Volunteerism is also an important aspect of my life. This year I organized an event called Carols for Cans where 140 students across my region sang christmas carols to collect food donations. This is my first science fair and it has been an amazing learning experience. This journey gave me an opportunity to interact with very inspiring and dedicated peers. The automobile industry's dependence on fossil fuels inspired me to think of an alternative technology to power cars. I would like to pursue this idea as I study Systems Design Engineering at the University of Waterloo next year. I aspire to be an entrepreneur and I would like to develop a company around my project. If you are thinking about doing your own science project, I highly recommend it! My only regret is that I didn't start earlier. Don't be intimidated because you think you are too young. You would be surprised what you can achieve when you devote yourself to something.