



## CWSF 2016 - Montreal, Quebec



## **Priyank Patel**

## **Hybrid Supercapacitor?** Battery System for Electric Vehicles

Challenge: Energy Category: Senior

Youth Science Canada

Pickering ON L1V 2R4

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Region: **Lambton County** City: Sarnia, ON

School: Northern C.I. & V.S.

Abstract: Electric cars are considered to be the future of automobiles, replacing the

conventional gasoline powered vehicles of today. Though being much more green, electric vehicles must overcome many obstacles to truly be a viable replacement. This project designed and built a small-scale energy storage system for electric vehicles using a combination of supercapacitors and batteries to improve battery life, performance, and regenerative breaking.

## **Biography**

My name is Priyank Patel and I am a student at NCIVS in Sarnia, ON. I have a passion for science, which has driven me to participate in the Science fair. I plan to pursue a career in the field of science through post-secondary school and later. My project focused on increasing the efficiency of electric vehicles. By designing a hybrid system that incorporated both supercapacitors and batteries, I was able to drastically improve the acceleration of the vehicle while, at the same time, increasing the longetivity of the batteries. As a science fair participant myself, I would strongly recommend participating in a local science fair, as it is a great learning experience with lots of opportunities.

Awards	Value
Excellence Award - Senior - Bronze Medal	
Sponsor: Youth Science Canada	
University of Ottawa Entrance Scholarship	\$1 000
Senior Bronze Medallist - \$1000 Entrance Scholarship	
Sponsor: University of Ottawa	
Western University Scholarship	\$1 000
Bronze Medallist - \$1000 Entrance Scholarship	
Sponsor: Western University	
Total	\$2 000





