

# CWSF 2012 - Charlottetown, Prince Edward Island



## Diba Shojaeigoradel

### Using High Voltage Source for Low Voltage Load

**Challenge:** Innovation

**Category:** Junior

**Region:** York

**City:** Thornhill, ON

**School:** As-Sadiq Islamic

**Abstract:** In this project I used a high voltage source (12V) with a low voltage load (3V light bulb), and used PWM algorithm to prevent my load from burning without using any resistors or transformers. This project can be used in variety of industries (military, aerospace, aviation, and robotics). The benefits of this project are; 1. Saves energy (eco-friendly) 2. Saves space 3. Saves weight

#### Biography

Hi my name is Diba. I turned 14 years old on April 4. Ever since I was 8 years old I wanted to be a programmer. I have travelled to many places and had lived in Malaysia for 1 year and 6 months, when I was there I had attended in Fairview International School and had participated in an essay contest and had got second. I also participated in their science fair and I had got first in the field of biotech. Outside of school I joined the Petronas robotic team, and our team had got first. Once I came back to Canada I went to As-Sadiq Islamic School and joined the math club, basketball and soccer team. At home I spend most of my time programming hardware's, programming software's, and working on my projects (like brakes for cars without brake pads). Now I want to use programming in our everyday life (programming machines). I want to become a computer software engineer and would like to study in the University of Stanford.

#### Awards

#### Value

Excellence Award - Junior - Bronze Medal Sponsor: Nuclear Waste Management Organization	\$300
Western University Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: Western University	\$1 000
<b>Total</b>	<b>\$1 300</b>