

# CWSF 2012 - Charlottetown, Prince Edward Island



## Nikhil Patil

### Optical Illusions - Does Colour Affect the Illusion?

**Challenge:** Discovery

**Category:** Junior

**Region:** Waterloo-Wellington

**City:** Waterloo, ON

**School:** Centennial P.S.

**Abstract:** Our work "Optical Illusions - Does Colour Affect The Illusion?" studies optical illusions, specifically colour modifications. The first thing tested was whether vision level affects susceptibility to illusions. We found that they are not correlated using the chi-squared test of independence. The second thing tested, our main focus, was whether colour modifications that maintain relation on the color wheel are equivalent in the illusion's effectiveness.

### Biography

My name is Nikhil Patil, I am in Grade 7 at the congregated class, at Centennial P.S in Waterloo, Ontario. I have done previous projects on robotics as well as artificial intelligence. I enjoy watching/playing all sports. I have been taking karate classes, since 2005, and have achieved my Brown-Black belt. I also play Rep soccer for Waterloo, for the past three years. Lastly, I enjoy learning card tricks. I gained my inspiration for the topic of optical illusions, as I have always been fooled by them, and wished to find how they work. This is another reason why I like card tricks. Some advice for others who are thinking of entering is that they should make sure that they know what they are talking about. The judges ask a lot of questions, which is why they should know some background information. I would like to pursue a topic of a more "real life" application, or an innovative solution to a problem, for next year's science fair. I have won gold in the Waterloo-Wellington science and engineering fair (for life science), as well as the Ontario Stepping Stone award. I hope to continue going to science and math contests.

### 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
Total	\$1 300