



## CWSF 2018 - Ottawa, Ontario



## **Mitchell Hynes**

Saturization: A New Method for Contrast in Monochromatic Vision

Challenge: Innovation Category: Senior

Region: Eastern Newfoundland

City: Paradise, NL

School: Holy Heart High School

**Abstract:** Extreme colour blindness is no joke, every day 1 in 40,000 people are born

with Achromatopsia. Every day these people struggle with watching movies, playing videogames, and even going outside. My project is a computer algorithm to treat media, for easier viewing with grey vision. My method is innovative, one of a kind, and where it comes from is totally unexpected!

## **Biography**

Originally my method was a simple art project, to algorithmically make colours pop when compared together. When I was presenting it to a friend, something clicked. I realized it could help people with monochromatic vision, who cannot contrast colours like we can. There are already methods for treating people with colour blindness, but not of this type, achromatopsia is generally ignored in media treatments for colourblindness. My plans for future observations are to implement this method into the web, for a better web browsing experience for people with achromatopsia, as well as using it to increase accessibility to public parks, and to improve movies and viewing experiences. The advice I'd give to other students planning on doing a project is to go for it! Be laser-focused on what matters to you, and improving life on earth.

Awards	Value
Excellence Award - Senior - Bronze Medal	
Sponsor: Youth Science Canada	
Carleton University Entrance Award	\$1 000
Senior Bronze Medallist - \$1,000 Entrance Award	
Sponsor: Carleton University	
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	\$3 000





Youth Science Canada

