

CWSF 2008 - Ottawa, Ontario



Matthew Thiffault

Weather Observation UAV

Division: Health Sciences / None

Category: Senior

Region: Niagara

City: Queenston, ON

School: Sir Winston Churchill

Abstract: Current ground based weather stations are prone to inaccuracies due to their placement and surroundings. The goal of this project was to design and build an airborne, cost effective, unmanned, convenient, and environmentally friendly weather observation system. The result was a remotely controlled electric aircraft with onboard sensors for temperature, pressure, humidity and airborne particulate levels. The collected information is stored or transmitted for analysis.

Biography

Matt Thiffault was born in Mississauga Ontario, but has lived in the Niagara-on-the-lake area all of his life. He is a 2007 graduate of Sir Winston Churchill Secondary School in St. Catharines where he attended the Extended French program. Matt has just completed a five month mentorship at Brock University where he worked on a project in the Electronics Shop. A retired Warrant Officer in the Royal Canadian Air Cadets, Matt has earned both his Glider and Power Pilot's Wings. His experience as Head Technician at Sir Winston and as a Niagara School Board Technician is being put to use as he works for P.S.A.V. in St. Catharines to earn money for University. Matt has a keen interest in computers and has been accepted into the Computer Science Co-op Program at the University of Waterloo where he will begin his studies in the fall.

Awards

Value

Dalhousie University Faculty of Science Entrance Scholarship Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: Dalhousie University, Faculty of Science	\$2 000
The University of Western Ontario Scholarship Silver Medallist - \$1500 Entrance Scholarship Sponsor: University of Western Ontario	\$1 500
University of Ottawa Entrance Scholarship Senior Silver Medallist - \$3000 Entrance Scholarship Sponsor: University of Ottawa	\$3 000
Silver Medal - Engineering - Senior Sponsor: Youth Science Foundation Canada	\$700
Total	\$7 200