

# CWSF 2012 - Charlottetown, Prince Edward Island



## Ian Vaillancourt

### Urban Sky Farming

**Challenge:** Environment

**Category:** Senior

**Region:** Montreal

**City:** Pierrefonds, QC

**School:** Polyvalente Pierrefonds

**Abstract:** Vertical farming is agriculture in urban buildings instead of in rural fields. This will allow more produce to be grown in less space using much less water and reduces greenhouse gas emissions. My project involved the construction of a working model vertical farm that incorporates features such as hydroponics, aquaponics and the use of renewable energy sources.

### Biography

My name is Ian Vaillancourt and I am currently a Secondary 5 International Baccalaureate student at Pierrefonds Comprehensive High School in Montreal, Quebec. I live a very active lifestyle, participating in many different sports including competitive swimming, water-polo, diving, cross-country running, volleyball, and Brazilian ju-jitsu. In my spare time, I enjoy playing video games and reading. I also enjoy spending time with my friends and family. The idea for my project was developed in an Environmental Science class when we were assigned to write a paper on a topic that interested us? that was when I discovered the Lufa Farms (rooftop gardening project) in Montreal. When I chose my Personal Projects topic at the end of the 2011 school year, I decided to build a working model of a vertical farm because the concept fascinated me. I would like to continue working on my project so that I can grow various plants in my system using agricultural techniques: aquaponics and hydroponics. Furthermore, I want to make suitable water solutions to aid in plant growth. My advice for any student doing an extensive project is to start as early as possible so that there is enough time to correct mistakes.

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