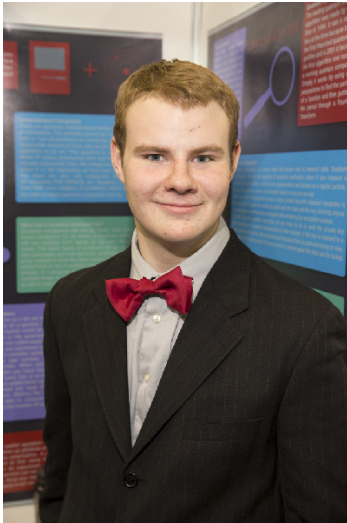


CWSF 2015 - Fredericton, New Brunswick



Isaac McAuley

Quantum Computers: Bits of Matter

Challenge: Information

Category: Senior

Region: Saskatchewan Chinook

City: Herbert, SK

School: Herbert School

Abstract: The field of quantum computers is taking computer science and merging it with particle physics. Classical computers use transistors to compute information, quantum computers use fundamental particles as bits. Because particles behave in such a different way than transistors quantum computers bring new properties to new computer science and open up a door to problems that could have never been solved without them.

Biography

I am Isaac McAuley. Since I was 4 I lived in the small town of Herbert, Saskatchewan. Since I was a young child I have loved science, math, and especially computers. I have always loved to read about science and teach myself about math not taught in school. Around two years ago my uncle told me about quantum computers that were currently being built. I was immediately intrigued because I had heard about the concept of them but I didn't know they were a possibility. Two years later I still love the topic, so much so that I hope to pursue making one as a career. If I was starting this project over I wish I would have started with algorithms sooner. Learning about the their programming one told me a lot of how one would actually be built.