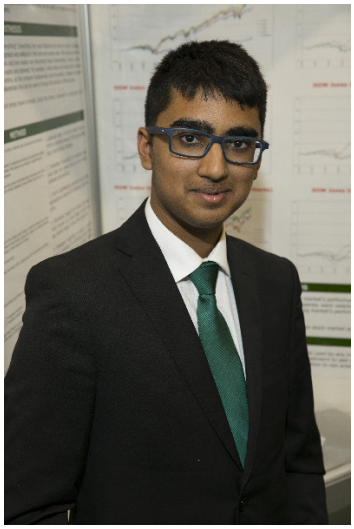
CWSF 2017 - Regina, Saskatchewan



Sparsh Agrawal

Developing an Optimal Stock Trading Algorithm Using Data Mining Techniques

Challenge: Information
Category: Junior
Region: Manitoba Schools Science Symposium
City: Winnipeg, MB
School: Acadia School

Abstract: This project developed an information system combining multiple stock analysis agents to develop a new algorithm for forecasting future stock trends of NYSE and NASDAQ listed stocks, thus improving on existing stock analysis methods. Developed information system uses historical stock information of all NYSE and NASDAQ listed stocks since their IPO. An iPhone application was also developed to present algorithm's recommendations on stocks to users.

Biography

I am Sparsh Agrawal. I go to Acadia Junior High in Winnipeg, Manitoba. I am interested in mathematics and finance. I want to attend Harvard Business School when I'm older, and want to manage my own hedge fund. One of my biggest passions is hockey. I'm a big Sidney Crosby fan and have the Pittsburgh Penguins penciled in as the Stanley Cup champions once again. Something else is table tennis, which I love to play. In fact I've also represented the province of Manitoba in this sport. While watching hockey games I hear a lot about analytics. Experts using analytics to predict how a player will do, or which team will win using pure numbers. Then I wondered if this can be transferred somewhere else, and I thought of using analytics to forecast future stock performance. If I had to give advice to other students thinking of completing a project I would recommend exploring something they're really interested in.

Awards	Value
The Actuarial Foundation of Canada Award - Junior Sponsor: The Actuarial Foundation of Canada	$500
Excellence Award - Junior - Silver Medal Sponsor: Youth Science Canada	
Western University Scholarship Silver Medallist - $2000 Entrance Scholarship Sponsor: Western University	$2 000
Total	$2 500