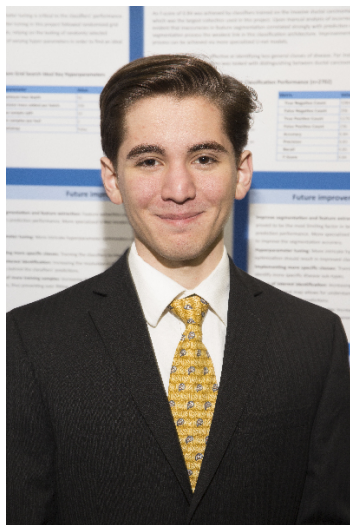


CWSF 2019 - Fredericton, New Brunswick



Hadi Almalki

Random Forest Classification of Histopathological Images

Challenge: Innovation

Category: Senior

Region: Waterloo-Wellington

City: Waterloo, ON

School: Laurel Heights S.S.

Abstract: Histopathology is the study of manifestations of disease on a cellular level. This project involves the development of a pathologist-aiding system that is able to classify images of histopathological tissue sample slides for purposes such as biopsy diagnosis. This is accomplished by using a combination of computer classifiers that have been trained on collections of labelled training samples.

Biography

My name is Hadi Almalki, and I attend Sir John A. Macdonald Secondary School in Waterloo, Ontario. The large scope of domains in which computers can be used to improve and enrich the world has been my primary motivation to develop and implement computer-based solutions to solve real-world problems. My enjoyment in the independent and self-directed learning, collaboration, and understanding needed to develop such solutions is the basis for my desire to pursue future studies in areas of science and computing. During my free time, I enjoy playing soccer, mountain biking, and reading. Some advice that I highly value is: excellence and distinction are achieved in an environment that facilitates diverse experiences, perspectives, and knowledge.

Awards

Value

Excellence Award - Senior - Silver Medal Sponsor: Youth Science Canada	
Dalhousie University Faculty of Science Entrance Scholarship Senior Silver Medallist - \$2500 Entrance Scholarship Sponsor: Dalhousie University, Faculty of Science	\$2 500
UBC Science (Vancouver) Entrance Award Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: The University of British Columbia (Vancouver)	\$2 000
University of New Brunswick Canada-Wide Science Fair Scholarship Silver Medallist - \$2500 Entrance Scholarship Sponsor: University of New Brunswick	\$2 500
University of Ottawa Entrance Scholarship Senior Silver Medallist - \$2000 Entrance Scholarship Sponsor: University of Ottawa	\$2 000
Western University Scholarship Silver Medallist - \$2000 Entrance Scholarship Sponsor: Western University	\$2 000
Total	\$11 000