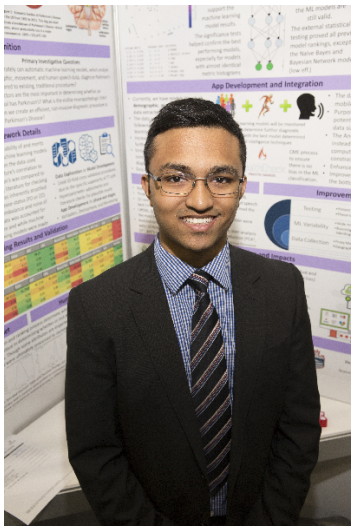
ESPC 2019 - Fredericton (Nouveau-Brunswick)



Shounak Ray

A Predictive Diagnosis for Parkinson's Disease Through Machine Learning

Défi: Innovation
Catégorie: Sénior
Région: Calgary Youth
Ville: Calgary, AB
École: Webber Academy
Sommaire: There is significant financial and emotional loss associated with Parkinson's disease, which currently has a misdiagnosis rate of over 30%. A more efficient and accurate ML-based approach was developed, with approximately 97% accuracy, via analyzing demographic, movement, and speech data. This new diagnostic tool was developed into a JAVA-based application, which has the potential to be integrated into a clinical/medical environment in the near future.

Biographie

Hello! My name is Shounak Ray, a grade 11 student at Webber Academy, Calgary. I am keen to learn almost anything about science and have participated in the regional science fair since grade 7. Excited about developments in machine learning, artificial intelligence, and health science, I am now working to use data analytics to diagnose neurological diseases. I have applied my expertise and enthusiasm in these fields in other areas like the Sanofi BioGENIUS competition and SAS Big Data Challenge, participating at the national level both times. I also love to debate and participate in business case competitions. Excited about a wide range of scientific developments, I believe that the Canada Wide Science Fair will be an amazing opportunity for discovery and discussion as I meet individuals who share similar passions and strive to make a difference in the world they live in.

Prix	Valeur
Prix pour l'innovation Ted Rogers - Toutes catégories Commanditaire: Rogers Communications Inc.	2 000,00 $
Prix d'excellence - Sénior - Médaille d'argent Commanditaire: Sciences jeunesse Canada	
Bourses d'admission de la Faculté des sciences de l'Université Dalhousie Médaillé d'argent, sénior - Bourse d'admission de 2 500 $ Commanditaire: Université Dalhousie, Faculté des sciences	2 500,00 $
Prix d'admission en sciences de UBC (Vancouver) Médaillé d'argent, sénior - Bourse d'admission de 2 000 $ Commanditaire: The University of British Columbia (Vancouver)	2 000,00 $
Bourse d'admission de l'Université du Nouveau-Brunswick Médaillé d'argent ? Bourse d'admission de 2 500 $ Commanditaire: Université du Nouveau-Brunswick	2 500,00 $
Bourse d'admission de l'Université d'Ottawa Médaillé d'argent, sénior - Bourse d'admission de 2 000 $ Commanditaire: Université d'Ottawa	2 000,00 $
Bourse d'études de Western University Médaillé d'argent - Bourse d'admission de 2 000 $ Commanditaire: Université Western	2 000,00 $
Prix Jeunesse innovante - Sénior Commanditaire: La Fondation Gwyn Morgan et Patricia Trottier	1 000,00 $
Prix Jeunesse innovante - Sénior Commanditaire: La Fondation Gwyn Morgan et Patricia Trottier	7 000,00 $
Total	21 000,00 $