# Aaron Abraham

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## **FDUCATION**

#### WEBBER ACADEMY

Sept 2015 - June 2019 | Calgary, AB Overall average: 98%

Academic Achievements:

- Top average in Grades 9 and 11
- Top subject marks in all Programming courses
- Won multiple academic scholarships June 2015 Present | Calgary, AB

## LINKS

Github://aaronabraham311 LinkedIn:// Aaron Abraham

## COURSEWORK

#### **HIGH SCHOOL**

**Object Oriented Programming** iOS Development Web Development Iterative Algorithms Data Structures Procedural Programming AP Statistics AP Calculus BC

#### ONLINE/OUTSIDE SCHOOL

Stanford Machine Learning course University of Calgary Bioethics course

## SKILLS

#### **PROGRAMMING**

Proficient:

C++ • HTML/CSS • R

Familiar:

Python • Javascript • Matlab • Swift

Technologies:

Microsoft Office • caret • plotly • Git

# AWARDS

- 2018 Canada Wide Science Fair: silver medalist, Statistical Society of Canada Award, Youth Can Innovate
- 2018 Sanofi Biogenius: Provincial champion for science project
- 2018 Big Data Challenge: National SAS Analytics Award for most comprehensive analytics project
- 2014-2016 Canadian Geographic Challenge: 3-time top 5 finalist for national geography competition

## **EXPERIENCE**

#### WEB FREELANCER July 2017 - Present | Calgary, AB

- Created 6 websites for various youth organizations and a local business using Bootstrap and Javascript
- Utilized search engine optimization techniques to generate 350+ views for each website

#### CALGARY PUBLIC LIBRARY | Senior Code Club Volunteer

- Tutoring students in Python, HTML/CSS and basic computer principles based on code.org curriculum
- Collaborated with Code Club supervisor to create coding curriculum for advanced students

#### CALGARY MAYOR'S YOUTH COUNCIL | Co-CHAIR

September 2016 - Present | Calgary, AB

- Intiated and organized 2018 Innovation Challenge hackathon, with more than 60 youth attending
- Lead team in creating multiple youth reports for Mayor Nenshi; used in formulating city policy on cannabis usage

#### WEBBER ACADEMY STUDENT'S UNION | PRESIDENT

September 2016 - Present | Calgary, AB

- Organized 80 volunteers to host multiple fundraisers, dances, and spirit rallies
- Acted as a liason among students and administration to convey student body

## HERITAGE YOUTH RESEARCHER SUMMER PROGRAMMER (HYRS) | SUMMER INTERN

July 2018 - August 2018 | Calgary, AB

- Utilized hierarchical clustering and support vector machines to develop a new bioinformatics tool for the detection of important genes in cancer development
- Significantly increased accuracy of clustering compared to traditional metagene clustering
- Presented project in annual symposium in front of more than 200 visitors

#### CRITICAL MASS | Summer Intern

August 2017 - August 2017 | Calgary, AB

- Created prototype app using Proto.io for National Music Centre
- Implemented wireframing and other user experience principles in app design

## **PROJECTS**

#### SCIENCE FAIR | ENSEMBLE-BASED MACHINE LEARNING FOR ALZHEIMER'S DISEASE DIAGNOSIS

Sept 2016 - Present | Calgary, AB & Edmonton, AB

Created a diagnostic tool for Alzheimer's disease using blood data. Ensembled 5 machine learning models achieved 95.6% accuracy. Used statistical analysis to identify important blood-based biomarkers for Alzheimer's

## **BIG DATA CHALLENGE** | COMMUNITIES AND CRIME DATA ANALYSIS

Sept 2017 - March 2018 | Calgary, AB

Analyzed violent crime rate trends in the U.S. using Python machine learning and data analysis skills and created unique policy recommendations.