

HARPREET (HARRY) SINGH

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Engineering Co-op Program
University of Alberta

UNIVERSITY OF ALBERTA ACADEMIC AND CO-OP STATUS

Mechanical Engineering, BSc, 2018	(Cooperative Program)
Cumulative Grade Point Average	4.0/4.0
Completed Academic Terms	3 of 8
Completed Co-op Work Terms	1 of 5
Length of Next Work term	8 months

EDUCATIONAL ACHIEVEMENTS

Dean's Research Award, University of Alberta, 2014
Cenovus Energy Mechanical Engineering Scholarship, 2014
University of Alberta Academic Excellence Scholarship, 2013
Faculty of Engineering Academic Excellence Scholarship, 2013
Canadian Association of Petroleum Producers Academic Excellence Scholarship in Engineering, 2013
Alexander Rutherford Scholarship, 2011 - 2013

WORK EXPERIENCE

ALBERTA ENVIRONMENTAL MONITORING, EVALUATION AND REPORTING AGENCY January 2015 – present
Science & Technology Engineering Co-op

- Reviewing and testing advanced monitoring technology and algorithms
- Developing and refining computer programs and algorithms to assure/improve data quality
- Gathered invaluable experience of working in an office environment and effectively collaborating with coworkers

UNIVERSITY OF ALBERTA, Dpt. of Electrical and Computer Engineering May – December 2014
Research Assistant

- Designed and implemented a GUI for a fault detection mechanism using Matlab, incorporating features like live-plotting and post-editing of the collected dataset
- Developing a model that classifies objects based on multi-class SVM approach and graphs the data based on several factors
- Boosted my adaptability and problem solving skills by working on multiple projects, while collaborating with professors and graduate students

CAMPUS INTERCEPT, Edmonton, AB September 2013 – April 2014
Microsoft Campus Ambassador

- Facilitated workshops to demonstrate and promote new technologies developed by Microsoft
- Honed leadership skills via effective communication between Sales Managers and other Campus Ambassadors
- Developed effective time management and interpersonal skills by balancing a 15 hour weekly work schedule with full time studies

COMPUTER EXPERIENCE

- Strong knowledge of and several years of programming experience in C++ and Matlab along with working knowledge of Java and Python
- Experienced in designing 3D model objects in Solidworks
- Proficient with Microsoft Office: Word, Excel, Outlook and PowerPoint

ADDITIONAL INFORMATION

Volunteer Activities

- **Research Assistant**, Department of Chemistry, University of Alberta, July – August 2014
 - Assisted in synthesis and analysis of multiple rare-earth transition metal compounds
 - Determined the crystal structure of these compounds using various processes like X-ray diffraction and X-ray photoelectron spectroscopy
- **Student teacher** with SOS Children's Villages of India, 2009 – 2011
 - Taught underprivileged young children the basics of reading, writing, and mathematics

Clubs and Teams

- **Member** of the U of A Formula SAE club, 2013 – present
 - Designed and assembled the body of a race car using carbon fiber while learning about distinguished processes like bagging, debulking, and breading
- **Member** of the Science Olympics team and Maker's Club, Strathcona High School, 2012-2013
 - Built and programmed small scale robots which performed distinguished tasks
 - Represented high school at Science Olympics, APEGA after several months of preparation
- **Vice President** of High School's Computer Club (Warp), 2011 – 2012
 - Represented high school and won awards at various provincial and national programming competitive events
 - Developed team leadership via negotiating with school authorities, sponsors and other school students, planning sub events, and mentoring tasks to other members

Achievements

- Position III, HackED 2015, University of Alberta, 2015
- Participant, First Year Programming Contest, University of Alberta, 2013
- Honorable Mention, Iverson Programming Contest, University of Alberta, 2013
- Participant, Science Olympics, APEGA, 2013
- Participant, Canadian Computing Competition, University Of Waterloo, 2013
- Position III, G@TEWAY '12, C++ Programming Competition, India, 2012
- School Wizkid Medal, National Cyber Olympiad, India, 2011

Other

- Have Class 5 driver's license with clean driver's abstract
- Have WHMIS and CSTS certification

REFERENCES AVAILABLE UPON REQUEST