

# FAIZY AHSAN

faizy.ahsan@mail.mcgill.ca,

https://www.cs.mcgill.ca/~fahsan1

Ph: 514-449-2672

Area of Interest: Machine Learning, Data Mining, Algorithms and Bioinformatics

Prog. Languages: **C, C++, JAVA, Python, R, Matlab, Shell, PHP, HTML**

Platforms: **Windows, Linux and OS X**

Database: **MySQL, Microsoft Access, MongoDB**

Micro Controllers: **AVR, Arduino**

Tools & Utilities: **MEAN Stack, Apache, Netbeans, Eclipse, VirtualBox, Microsoft Azure, OpenCV and OpenMP**

## ACADEMICS

### Doctor of Philosophy in Computer Science

Jan 2016 – present

*McGill University, Montreal, Quebec*

Development of advanced machine learning techniques for biological sequence analysis and gene regulation.

### Masters of Science in Computer Science

Sep 2013 – May 2016

*McGill University, Montreal, Quebec*

CGPA – **3.80/4.0**

MSc Thesis: *Cell Type Prediction of Transcription Factor Binding Sites using Machine Learning*

Implemented machine learning techniques using python scikit-learn library, Shell, bioinformatics and statistical tools

### Bachelor of Technology in Computer Science and Engineering

July, 2008 – April, 2012

*Indian Institute of Technology Jodhpur, Rajasthan, India*

CGPA – **8.38/10**

Offline character recognition for Hindi language using **Open CV** libraries and neural networks (Artificial Intelligence; A); Developed parser for **Mini C** language in Compiler course utilizing **flex** and **yacc** for syntax and semantic analysis; Implementation of **HTTP** using Unix Sockets (Computer Networks Course).

## Teaching Assistant

*Intro. to Computer Science; Algo. & Data Structure*

Fall 2014

*Intro. to Computer Science*

Winter 2015, Fall 2015, Winter 2016, Winter 2017

*Database Systems*

Winter 2016, Winter 2017

*Principles of Web Development*

Fall 2016

Helped me to improve and develop skills in **Programming, Algorithms** and **Time Management**. Prepared several **JUnit test cases** for programming assignments in **JAVA**.

## JOB EXPERIENCE

### Machine Learning Researcher

May – Aug, 2015

*TandemLaunch Inc., Montreal, Canada*

*with SensingDynamics*

Developed front end and back end of software system to recognize smell using Microsoft Azure, RShiny, C and PHP

### Data Mining Internship

Feb – Aug, 2014

*National Institute of Informatics, Tokyo, Japan*

*under Prof. Michael Houle*

Development of Clustering algorithms for High Dimension Datasets using **C, C++, Shell** and **Matlab**.

### Scientist B

July, 2012 – July, 2013

*Centre for AI & Robotics, Defense R&D Org., Govt. of India*

Involved in development and implementation of Classification and Regression Trees using Gini Twoing criteria in **Matlab and C**.

### Summer Intern

May – July 2011

*Computational Research Laboratory, Tata Group, India*

Development of front-end & back-end of Chipmunk ( Secure Data Transfer Appliance of CRL) using **C, SHELL, Apache, MySQL, PHP, HTTP**

## MAJOR PROJECT

### Operations Management

Feb – Aug, 2015

*under Prof. Saibal Ray and Prof. Shanling Li, Desautels Faculty of Management, McGill University*

To forecast the quantity of goods to be kept in retail stores using Machine Learning and Data Mining tools with **Microsoft Access, R** and **SHELL**.

### Development of a Multi-sensor Wireless Smart-home

*under Dr. Deepak Fulwani, EE and Dr. Venkata Ramana, CSE, IIT Jodhpur* Aug 2011 – April 2012

Developed Zigbee based home network, appliance controller and their interfacing with the aim of scalability, power saving modes, centralized system and low energy consumption using **Arduino** (for sensor control), **Java** (for User Interface) and **C** ( for back end).

## HONOURS

- Editor of JOUR, newsletter of IIT Jodhpur. (2009 to 2011)
- 1st prize in Rube Goldberg at IIT Kanpur. It was required to put stamp on a paper in at least fifteen steps. (Feb, 2010)
- 1st prize in autonomous robotics competition 'Flag Picker' at LNMIIT, India. (Mar, 2010)
- Event Coordinator of Robotics Competition in Nimble'10, Annual Techfest of IIT Jodhpur. (Nov, 2010)
- I have been a part of Volley ball team of IIT Jodhpur

Reference: **Prof. Mathieu Blanchette, McGill University** [blanchem@cs.mcgill.ca](mailto:blanchem@cs.mcgill.ca)

**Prof. Doina Precup, McGill University**

[dprecup@cs.mcgill.ca](mailto:dprecup@cs.mcgill.ca)