

## Address

385, Bell Street  
Ottawa, Ontario  
Canada  
K1S4K3

## Contact No.

+1 (873)822-1610

## Mail

byteharman0101@  
gmail.com

## Web & Git

linkedin/HarmanBhutani  
harmanbhutani.github.io  
GooglePlay/Harman  
github/HarmanBhutani

## Programming

Python  
R  
Java  
JavaScript  
React  
Node.js  
C++  
SQL

## OS Preference

GNU/Linux ★★★★★  
MacOS ★★★★★  
Windows ★★★★★

## Databases

MySQL  
MongoDB  
PostgreSQL  
PL/SQL  
SQLite  
Redis

## Machine Learning

Regression  
Naïve Bayes  
Support Vector  
Machines  
Clustering  
Classification  
Random Forest  
Natural Language  
Processing

# Harman Bhutani

## Software Engineer

## Objective

To work in a firm with professional work driven environment where I can utilize and apply my knowledge, skills which would enable me to grow while fulfilling organizational goals.

## Education

2019-Present **Master of Electronic Business Technologies**  
University of Ottawa, Ottawa.

2013-2017 **Bachelor's Degree in Computer Science and Engineering**  
Guru Nanak Dev Engineering College, Ludhiana(India).

## Work Experience

06/20 - Present **Data Scientist**

[Meta Innovation Technologies](#)

I am working as a Data Scientist in my Co-op term with Meta Innovation. I have contributed in development of their AI dashboard as well as educational portal on React and has also developed dashboard where user can upload their data and my binary classification model can classify data using sklearn and XGBoost. I worked on data modeling which involves reading the data from many different sources and creating a proper model that can be used to obtain analytical results for Dashboards and worked very closely with the whole team to come up with different opportunities that can drive business as well as customer growth.

08/20-10/20 **Machine Learning Engineer**

[Deol Data](#)

I have worked on various modules such as Object detection, Face recognition, historical recording of faces detected etc and has developed Android and iOS app for same as well as a proof of concept of idea. I helped team to choose which Machine Learning models to use and developing it and in storing data to be used in training and testing of the model.

02/20-09/20

03/20 - 06/20 **Machine Learning Intern**

[BraiYT.AI](#)

Developed a Machine Learning model to detect Licence Plates of cars from surveillance camera and save Licence plate text to Database. I used Single Shot Detector (SSD) in Keras with Tensorflow as backend and trained model with hyper-parameter tuning and model achieved mAP value of 94.3. Contributed to choosing which Machine Learning models to use and setting them up. Worked on preprocessing data to be in a format ready for the Machine Learning model (anomaly detection, normalizing). Taking ownership over certain datasets and being accountable for them being pre-processed accordingly. Taking ownership over Machine Learning models, being accountable for their training, accuracy and tuning. Contributed to the architecture of the code base. <https://braiyt.ai/about/>

## Platforms

Tableau  
Apigee  
Microservices  
Tensorflow  
Android  
iOS  
Splunk  
Jenkins  
Google Cloud

## Positions of Responsibility

Computer Society of  
India Google  
Developer Group,  
Montreal Google  
Cloud Facebook for  
Developers Google  
Student Club Linux  
User Group NSS  
Women Techmakers

## Hobbies

Internet Activist  
Solving Puzzles  
Playing Chess  
Reading Novels  
Listening music  
Watching Movies

### 01/20 - 05/20 **Teaching Assistant**

[University of Ottawa](#)

Teaching Enterprise Architecture about integration of management and technology for various levels of organisations. Making students work on various frameworks and strategic plans for enterprise solution.

### 08/19-02/20 **Research Assistant**

[University of Ottawa](#)

I have developed a research based app for smart watches which will monitor ECG from user's heartbeat and developed a machine learning model which is customise for each user and predict before hand if user is going to have heart attack or not and 6 other similar heart diseases. It will be available for iWatch and other smart watches soon.

### 08/19-12/19 **Teaching Assistant**

[University of Ottawa](#)

Teaching assistant for course Computer Architecture, taking lab of students, teaching them working of Control Unit, ALU, Registers, Buses using Quatrus2.

### 07/17-07/19 **Application Development Analyst**

[Accenture](#)

Developing Neural model using open source libraries such as Tensorflow, sklearn etc. and visualisation using R and Tableau for 1M+ customers using Spark to scrape, clean and analyse large data for T-Mobile. Worked as a developer for Architecture Integration ePlatform and my work is to design and implement system that expose RESTful APIs using scripting languages, Microservices with API management tool called APIgee. Worked on Vmware in order to develop fault-tolerant highly available systems. Developed the complete architectural documentation of enterprise solution and presented to the Managing Director of the Client.

## Internships and Training

### 06/16 - 12/16 **Machine Learning & Neural Network**

[GNDEC Data Science](#)

Design and development of various algorithms of Machine Learning using various techniques such as Linear, Logistic Regression, K-nearest neighbour, reinforcement learning etc. Major Python libraries I worked on are Numpy, Pandas, SciPy, Scikit-Learn, Matplotlib, Seaborn, OpenCV, Keras, TensorFlow, Pytorch

### 06/16 - 01/17 **Google Facilitator**

[Google, India](#)

*Selected as Google Facilitator from my college. Taught Students about Android and Artificial Intelligence under the program Google CS with Android Newspaper Image link*

### 05/15 - 08/15 **Big Data analytics using Hadoop**

[N.I.E.L.E.T, Mohali](#)

Completed my 6 weeks industrial training in Big Data analytics using Hadoop where I worked on Map-Reduce algorithm and worked on various platforms such as Pig, Hive, HBase, Jaql etc.

### 05/15 - 08/15 **Android Intern**

[Hum Hain, Ludhiana](#)

Design, developed and successfully launched the official android app for ludhiana based delivery startup [www.HumHai.in](#).

### 08/14 - 12/14 **Java Trainee**

[3cm Infotech, Ludhiana](#)

Three months training in Core Java.

### 04/14 - 06/14 **Trainee**

[GNDEC, Ludhiana](#)

Six weeks training in SQL Database.

## Seminars

### Java Trainer

[Gulzar group of Institutions,Khanna](#)

Delivered 6 weeks Industrial Training to second year Computer Science students at Gulzar group of Institutions from May,17 to July,17

### Data Science

[DAV,Jalandhar](#)

Attended I.T. day at DAV,Jalandhar and gave a seminar on rise and need of data scientist in this digital era addressing around 100 students.

### Google Adwords

[Chitkara University , Rajpura](#)

Delievered a lecture on Google adwords and its fundamentals at Chitkara University under the joint program run by Google Student Club GNDEC and Chitkara University.

## Certifications

### Splunk Certified User

[Splunk](#)

*Learnt about the basics of logs analytics and Splunk queries*

*View Certificate*

### R Programming

[Udacity](#)

*Learnt about the basics of R Programming Language and its various functions*

### Google Adwords

[Google](#)

*Advertise locally and attract customers with the products that they search for*

### Machine Learning

[Coursera](#)

*Machine learning where I worked on pattern recognition and neural networks*

### Android App Development Nanodegree

[Udacity](#)

*Building an android application qualifying all the parameters specified by them*

### Big Data & Analytics

[Amazon Web Services](#)

*Learnt basics about using amazon services for Data analytics.*

## Achievements

### Runner up - MIT Reality Hack

[MIT](#)

*Runner up in hackathon at Massachusetts Institute of Technology, USA where I developed an application for people suffering from ADHD and Autism.*

### Organiser TEDx Ottawa

[TEDxOttawa](#)

*This is one of the highest award in Accenture. Awarded for great performance in the field of innovation and development of in-house application for better delivery of services for the Client.*

### ACE Award Winner - 2018

[Accenture](#)

*This is one of the highest award in Accenture. Awarded for great performance in the field of innovation and development of in-house application for better delivery of services for the Client.*

**APEX Award Winner - 2018**[Accenture](#)

*Awarded for showing excellent efforts in delivering and making project go live on time.*

**CII Hackathon Winner- 2017**[Bill and Melinda Gates Foundation](#)

*I won the CII Hackathon 2017 at Pragati Maidan , New Delhi and awarded first prize by Head of Bill and Melinda Gates Foundation where I developed an application on Breast Cancer Classifier .*

*<https://github.com/HarmanBhutani/BreastCancerClassification>*

**Startup Weekend**[Startup India](#)

*Awarded prize by Mr.Rakesh Bharti Mittal(Airtel) for young entrepreneurship. I proposed an idea of application based on IoT and Data Science in Medical field*

**TiE Hackathon Winner 2017**[TiE,Chandigarh](#)

*Won Consolation prize in TiE Hackathon Competition , Chandigarh where I developed the Android Game for Blind People.*

*<http://hackathon.tiechandigarh.org>*

**National Award for growing Startup**[TiE, Chandigarh](#)

*Won award at TiE National award Ceremony in Chandigarh for young growing startup. I developed an Android app and order management system for this startup*

*Newspaper Image link*

## Projects

**Customer Churn Prediction using the Neural Network**

*Performed the Exploratory Data Analysis (EDA) to understand the relationships and produce the inferential statistical results.*

*Implemented the Random Forest for the feature selection.*

*Implemented the basic neural network using the Keras and accuracy produced by the classification model was 89.17.*

*Github - <https://github.com/HarmanBhutani/CustomerChurnPrediction>*

**Stock Prediction using Machine-Learning Algorithms** Used NSE data on the Logistic Regression, Random Forest and RNN . Used Box plot for outliers detection and LSTM and GRU on RNN to remove the problem of decreasing gradient.

Used the NLTK to generate the sentiment analysis to check the impact of the trending news from Thomson Reuters.

MSE and RMSE values of our model are quite less which shows good accuracy.

Github - <https://github.com/HarmanBhutani/Stock-Market-Prediction>