



Linkedin - <https://bit.ly/2ySGFbm>
Google PlayStore - <https://bit.ly/2LnnHzp>
GitHub - <https://github.com/RashbirSingh>
Website - lazado.ihostfull.com/wp/

RASHBIR SINGH

Contact No.: +91- 9999955382
Email id: Rashbits@gmail.com
A-237, Majlis Park, Azadpur,
Delhi-110033

Objective

Seeking for challenging situations where I can use my experience and technical skills for the enhancement of the organisation and achieve the targeted goal in the shortest period of time while keeping the team motivated in the right direction.

Academic Qualification

Year	Schooling	Marks
2015-19	: Amity School of Engineering Technology, Amity University, Noida, UP Bachelor of Technology, Information Technology	: 7.54/10
2015	: Guru Nanak Public School, Pitam Pura, Delhi 12 th (Senior Secondary Examination) Central Board of Secondary Examination	: 83%
2013	: Guru Nanak Public School, Pitam Pura, Delhi 10 th (Secondary Examination) Central Board of Secondary Examination	: 9/10

Certification

Name	Issued By	Date	Certificate Number
Joy of computing using Python	: NPTEL	: May 2019	: NPTEL19CS09S61870250
Python Programmer for Data science	: Data Camp	: April 2019	: #78322
Data Analyst with Python	: Data Camp	: March 2019	: #9011299
Statistics with Python	: Coursera (University of Michigan)	: May 2019	: 469TZEM7VNCM

Programming with Python	:	Internshala Trainings	:	May 2018	:	D9BDC7B2-79C9-BEEE-C941-7385F2DB49CE
BlockChain and Bitcoin	:	Udemy	:	May 2018	:	UC-YDCQ2BQU
IoT Certification (Internet of Things)	:	Internshala Trainings	:	Feb 2018	:	1614E1B8-6202-f37c-386807C01306
Java Programming	:	Solo Learn	:	May 2017	:	1068-890726
C Programming	:	Rashtriya Academy of Computer Technology	:	Feb 2016	:	11377

Work experience and Internship

Organisation - Acidaes Solutions Private Limited (CRMNEXT), Noida-62, Uttar Pradesh.

Duration - January - Present

- Working as a graduate engineering in the field of data science as a data engineering and data analyst.
- Working on data analysis, prediction and autoML model on the data using python programming.
- Working on designing pipeline for the preprocessing and data manipulation using Java on Apache Beam framework that can use any runner to run the pipeline hence is more robust and scalable.
- Wrote an algorithm for captcha braking using headless selenium, OCR and Regex for data wrangling.
- Have undertaken projects based on unstructured data extraction, cleaning, and analysis for training the NLP based model and chatbot knowledge creating and NLP based news extraction for predicting votes outcome.
- Developed a web scrapper using selenium for raw data collection and then processed the data based using OCR and Regex.

Organisation - Defence Scientific Information & Documentation Centre (DESIDOC), DRDO, Metcalfe House, Delhi.

Duration - 6 Weeks (June - July'18)

- Worked as a student intern on data science(Machine learning, AI) field and did a comparative study on various machine learning algorithms.
- Also worked on Computer vision and implemented an AI-based self-driving car.
- Also proposed research on the comparative study of clustering algorithm for the analysis of GPS data under the guidance of DESIDOC head scientist, Dr.Yusuf Ansari.

Research Papers

Title : "VISIO": An IoT Device for Assistance of Visually Challenged

Conference : International Conference on Emerging Trends in Electro-Mechanical Technologies and Management (TEMP-2019)

Author : Rashbir Singh, Prateek Singh, Deepak Chahal, Latika Kharb

Conference Date : 24th-26th April 2019

URL : Waiting

Title : Analysis and Visualization Model for a GPS Dataset of Moving Vehicle

Conference : Smart Cities Symposium 2019, Bahrain

Author : Rashbir Singh, Vikas Deep and Deepti Mehrotra

Conference Date : 26th-27th July 2019

URL : Waiting

Title : BDT3V - A technique for big data testing considering 3V's

Conference : Second International Conference on Green Computing and Internet of Things' 2018

Author : Avi Bhardwaj, Rashbir Singh, Vikas Deep and Purushottam Sharma

Conference Date : 16th-18th August 2018

URL : Waiting

Title : Electricity Generating and Monitoring System using IoT

Conference : Smart Cities Symposium 2018, Bahrain

Author : Rashbir Singh, Vikas Deep and Deepti Mehrotra

Conference Date : 22nd-23rd April 2018

URL : <https://digital-library.theiet.org/content/conferences/10.1049/cp.2018.1385>

Title : Prosthetic Arm Controlled Using Mind Waves Called Mind-Your-Arm

Conference : World Research Forum for Engineers and Researchers (WRFER 2017), Delhi

Journal : International Journal of Advance Computational Engineering and Networking(IJACEN)

ISSN(p) : 2320-2106, **ISSN(e) :** 2321-2063

Volume And Issue : Volume-6, Issue-1, Jan.-2018

Author : Rashbir Singh

Conference Date : 5th November 2017

Award Won : Best Paper Presentation at WRFER 2017

URL : http://www.iraj.in/journal/journal_file/journal_pdf/3-434-15216282087-13.pdf

Title : TechEye for Visually impaired using Internet of Things

Journal : International Journal of Control Theory and Application

ISSN : 0974-5572

Volume And Issue : Volume-10, Issue-15, 2017

Author : Rashbir Singh, Naveen Garg and Vikas Deep

URL : <http://www.serialsjournals.com/serialjournalmanager/pdf/1492251944.pdf>

Project Undertaken

Title – Mind Controlled Appliances and Switches.

Technologies Used – IoT(Internet of Things), Bio Sensors - EEG, Computer Vision

Language Used – Embedded C, Python

Software Used – Anaconda, Arduino IDE

Hardware Devices Used – Arduino, IR sensor, EEG headgear, Raspberry pi, etc

Description – The idea proposes an OCR based text detection using tesseract with brain concentration analysis using EEG with Raspberry Pi 3 for decision-making model and transfers the decision commands to Arduino over IR based single character conditional control.

Title – Smart health monitoring for patients with respiration diseases

Technologies Used – IoT(Internet of Things), Android, Data science - prediction and analysis

Language Used – Embedded C, Java, Python, XML

Software Used – Python IDE, Android Studio

Hardware Devices Used – Arduino, Bluetooth module, Carbon sensor, Air quality sensor, Etc

Description – The idea proposes a smart wearable watch which monitors the air quality around the user and suggest on the basis of air quality that how long the person should stay in that location, at what speed one should run while monitoring the users pulse rate and recommendation system based on the exhaled air by the user by calculating the difference between the healthy one and exhaled on, while notifying the nearest hospital and family members.

Patent Filed - CRN3231

Title – Learning Teaching Tool For ASD

Technologies Used – IoT(Internet of Things), ML(Machine Learning), EEG(Electroencephalograph), Data Mining

Language Used – Embedded C

Software Used – Arduino IDE, Rapid Miner

Hardware Devices Used – Arduino micro-controller, EEG Headgear, Bluetooth(HC-05)

Description – We verify which technique of data mining(K-NN, decision tree, Neural Net, Naive Bayes) would provide us with the most accurate for the prediction and classification of mental state of mind(ie. excited, not excited, relaxed) and small muscle movements(ie. eyes open and eye close) using the electromagnetic brain waves signals generated in our brain neurons(ie. alpha, beta, theta, gamma and delta) and using this application with EEG to detect different abilities the person has and situations or environment which make them hyperactive and propose the real-time solution for people with ASD.

Awards Won – (1) Cash Prize of Rs.9000 at Institution of Engineering and Technology organised Present Around The World, Northern Region finals(PATW 2018).

(2) Best Project Presentation at Annual Projects and Posters Technical competition (APPTeC 2018).

Patent Filed - CRN3060

Title – Electrogen Clenovator robot

Technologies Used – IoT(Internet of Things)

Language Used – Embedded C, Java, PHP

Software Used – Arduino IDE, Android Studio

Hardware Devices Used – Arduino micro-controller, Bluetooth(HC-05), Motors, Solar panels, TEG module, Dynamos, battery charger, Etc.

Description – We used three sources of electricity generation (Solar, Heat and Mechanical movement) and convert them into electricity and store it inside the battery. That stored electricity is used by the robot to move around and clean the air. The robot has a plant at the top. The robot is automatic and judges the environment and avoids obstruction using different sensors (Ultrasonic, air quality sensor, and light sensor) with android application support to control and receive real-time data over Bluetooth.

Awards Won – Finalist at Tryst IIT Delhi organised RENEW Environment with the cash prize of Rs. 25,000.

Patent Number - 201811026609

Title – Home Automation

Technologies Used – IoT(Internet of Things)

Language Used – Embedded C, Java, PHP, HTML

Software Devices Used – Arduino IDE, Android Studio, Wordpress

Hardware Devices Used – Arduino micro-controller, Bluetooth(HC-05), Wifi module, IR sensor, servos.

Description – A cost-effective smart home automation project which does not require any circuit change inside the main circuit board of the home and can be connected directly to the switchboard to automate and control the device using Android, wifi or IR remote control with the touch interface. Used for complete smart home automation which can be carried by the user and easy to use and maintain.

Patent Filed - CRN2905

Title – Mind-Controlled Robotic Arm

Technologies Used – IoT(Internet of Things), ML(Machine Learning), EEG(Electroencephalograph), Data Mining

Language Used – Embedded C, Java, PHP

Software Used – Arduino IDE, Rapid Miner, Android Studio

Database creation and connection - Firebase 11.0

Hardware Devices Used – Arduino micro-controller, EEG Headgear, Bluetooth(HC-05), Servos, Prosthetic arm model

Description – Used EEG to detect what different combinations are required for the movement of the arm, controlling arm using brain movements, a blink of eye, attention and concentration level and android smartphone using custom-made android application.

Awards Won – (1) Cash Prize of Rs.8000 at Institution of Engineering and Technology organised Present Around The World, Northern Region finals(PATW 2017).

(2) Cash Prize of Rs.7000 at India Electronics and Semiconductor Association organised Technotronics 2018.

Title – Voice Innovation Project

Technologies Used – Artificial Intelligence, Natural Language Processing, VoIP

Language Used – C#, Javascript

Software Used – API.AI, Twilio, VoIP

Description – Developed a customer calling based AI assistant which can answer to customer queries, create user database, store information and give personalized answers to questions, using Amazon Alexa and Google Assistant for the company called MRS (US based). In a collaboration project between India(Amity University, Noida) and USA (Drexel University) for the global classroom, from the whole university 20 students were selected and were divided into a team of five. MRS provided us with funds to carry out our research and make international payments. I also was the manager and technical team member representing team India.

Certificate – Certificate of achievement from MRS

Title – Walking System for visually impaired - Techeye

Technologies Used – IoT(Internet of Things)

Language Used – Embedded C, Java, PHP

Software Used – Arduino IDE, Android Studio

Hardware Devices Used – Arduino micro-controller, EEG Headgear, Bluetooth(HC-05), Ultrasonic sensor

Description – Used ultrasonic sensor for real-time tracking for blinds, pen drive sized small device connected to shoes sending the distance detail to plug and play custom build an android application if an obstruction is detected in left then the details will be sent to right ear and right in the right ear, while for the front in both ears. GPS support for real-time tracing and customizable application, and buttons to increase or decrease scanning area of the user and recommends the best path based on the usage of other users.

Awards Won – (1) Cash Prize of Rs.8000 at Institution of Engineering and Technology organised Present Around The World, Northern Region finals(PATW 2017).

(2) Best Project Presentation at Annual Projects and Posters Technical Competition (APPTeC 2017).

(3) Best Start-Up Idea at Annual Projects and Posters Technical Competition (APPTeC 2017).

Patent Filed - CRN2672

Computer Exposure

Domain	Technologies
Programming Languages	: C, C++, C#, Java, Python
Micro controllers and Micro processors	: Arduino , Raspberry Pi, Bolt IoT
Android application development	: Android Studio, MIT app Inventor 2
BlockChain	: BlockChain, Cryptocurrency and Smart Contacts
Database management and connectivity	: Firebase, PHP, SQL, SQLite
Data Structure	: Using C, C++, Java
Data mining and data analytics	: Rapid Miner
Data Science	: Machine learning, Deep Learning, Artificial intelligence, Natural Language Processing and Computer Vision
Games development	: Unity 3D
Web Development	: HTML, XML, Wordpress, javascript, CSS
Proficient in Microsoft Office	: Word, Excel, Power Point

Biomedical Exposure

Domain	Technologies
EEG	: NeuroSky Mind-Wave
Arm and its Degrees of freedom	: 3D modelling and servos
ECG	: AD8232

Area Of Interests

- Internet of things(IOT)
- Artificial Intelligence, Machine learning, Deep learning, Image processing, Natural language processing
- Brain computing
- Robotics
- Android app development
- Micro controllers/Processors (Raspberry Pi, Arduino, BoltIoT)
- Fitness, Cooking, Dancing

Extra-Curricular Activities/Achievements

- Five days workshop at Centre for Development of Advance Computing (CDAC) Mumbai on IoT.
- Student Innovator at Amity University, Noida.
- Certificate of appreciation from IIT Delhi with cash prize, Rs.25,000.
- Certificate of merit from Internshal for securing project on evaluation of waste disposal across India at CSIR-CDRI.
- Certificate of merit from Internshal for securing Electronics Engineering internship at LBD Robotics Private Limited.
- Selected for the NRDC budding innovator award from Amity University, Noida.
- Certificate of merit from powerlifting federation of India for North India Benchpress and Deadlift Championship.
- Participated in hackathon and paper presentation organized by Vivekanand Institute of professional studies.
- Participated in paper presentation at Vivekanand Institute of professional studies organized by computer society of India.
- President of E-Connect at Amity University, Noida.
- Participated and secured the position in top five in World food India hackathon.
- Certificate of appreciation from JUGAADIN.COM for a programmer.
- Participation at human values quarter 2015-16 at Amity University, Noida.
- Participated in events like Place-O-Pedia.
- Certification for appreciation for contribution in International conference on Information technology(InCite 2016).
- Attended workshops on Big Data/Hadoop, Android, PHP, Ethical hacking, SRS, IoT, Micro Processors organized by Apron.

Founder and Developer

- This startup idea motive is to develop projects for the welfare of society.
- A project based company which sale patents, hardware devices, software development codes, website development and IOT and freelancer projects.

Personal Details

Date of Birth : 08th August, 1997
 Gender : Male
 Category : General
 Nationality : Indian
 Languages Known : English, Hindi, Punjabi
 Social Skills : Active participation, good listening skills, always staying and keeping other motivated, affective communication.
 Strength : Self motivated, focused and dedicated, active listener, good communication skills, team work.

I hereby declare that the above information given by me is true to the best of my knowledge.

Date: 4th July, 2019
 Place: New Delhi


(RASHBIR SINGH)