Website - Lazado.USA.CC
Google PlayStore - https://bit.ly/2LnnHzp
GitHub - https://github.com/RashbirSingh

RASHBIR SINGH
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A-237, Majlis Park, Azadpur,
Delhi-110033

Objective

Seeking for challenging situations where I can use my Informative and technological skills for the enhancement of the company and reach the targeted goal in the shortest period of time and develop and learn.

Academic Qualification

Year		Schooling	Marks
2015-19	:	Amity School of Engineering Technology, Amity University, Noida, UP Bachelor of Technology, Information Technology	7.41/10
2015	:	Guru Nanak Public School, Pitam Pura, Delhi 12th(Senior Secondary Examination) Central Board of Secondary Examination	83%
2013	:	Guru Nanak Public School, Pitam Pura, Delhi 10th(Secondary Examination) Central Board of Secondary Examination	9/10

Certification

- **Programming with Python**

From - Internshala Trainings
Certificate Number - D9BDC7B2-79C9-BEEE-C941-7385F2DB49CE
Date Of Certification – 23/May/2018

- **BlockChain and Bitcoin**

From - Udemy
Certificate Number - UC-YDCQ2BQU
Date of Certification - 17/May/2018

- **IoT Certification (Internet of Things)**

From - Internshala Trainings
Certificate Number - 1614E1B8-6202-f37c-386807C01306
Date of Certification – 04/Feb/2018

• **Java Programming**
From **-** Solo Learn
Date Of Certification - 18/May/2017
Certificate Number - 1068-890726

• **C Programming**
From - Rashtriya Academy of Computer Technology
Regd. Number - 5466
Roll Number - 11377
Date Of Certification - 02/Feb/2016

Research Papers

Title : Electricity Generating and Monitoring System using IoT - paper accepted
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 : Applying data mining to detect the mental state and small muscle movements for the autistics(ASD)
Journal : International Journal of Data Mining and Bioinformatics
Author : Rashbir Singh, A. Sai Sabitha
URL : waiting

Title : Prosthetic Arm Controlled Using Mind Waves Called Mind-Your-Arm
Conference : World Research Forum or 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 – Leaning 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 electro-magnetic 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 hyper active 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 Applied

Title – Automatic Street lighting system
Technologies Used – IoT(Internet of Things), Image processing, Data analysis
Language Used – Embedded C, Python, Linux command line
Software Used – Python IDE
Hardware Devices Used – Raspberry pi, wifi module, piezoelectric material, IR sensor, Etc
Description – Using the technology of image processing along with the IoT to develop a smart street light system to lower electricity consumption when not in use, and generate electricity using car pressure and solar energy. Using different sensors along with image processing using YOLO(You Only Look Once) technology developed, saves more electricity than the primitive system and increases human and resources security on roads.
Patent Applied

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 an android application support to control and receive real-time data over Bluetooth.
Awards Won – Finalist at Tryst IIT Delhi organised RENEW EnvironmrnD with the cash prize of Rs. 25,000.
Patent Applied

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 switchboard to automate and control the device using Android, wifi or IR remote control with the touch interface. Used for a complete smart home automation which can be carried by the user and easy to use and maintain.
Patent Accepted

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.
Patent Applied

Title – House Cleaning 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), Ultrasonic sensors
Description – An android controllable house cleaning robot with obstruction avoiding capabilities, and can be controlled using android application which can even avoid falling from stares and cleans the house effectively.

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 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 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 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 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 Accepted

Computer Exposure

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	:	BitCoin and BlockChain Development
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
Games development	:	Unity 3D
Web Development	:	HTML, XML, Wordpress, javascript, CSS
Proficient in Microsoft Office	:	Word, Excel, Power Point

Biomedical Exposure

EEG	:	NeuroSky Mind-Wave
Arm and its Degrees of freedom	:	
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.
- 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 Aptron.

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: , 2019
Place: New Delhi **(RASHBIR SINGH)**