

# RASHBIR SINGH KOHLI

Data Analyst

## OBJECTIVE

Seeking for challenging situations where I can use my experience and technical skills acquired from work, research, and projects for the enhancement of the organization and achieve the targeted goal in the shortest period while keeping the team motivated in the right direction.

## CONTACT



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<https://bit.ly/3aa9KA5>

## PROGRAMMING LANGUAGES

Python



R



Java



C/C++



## SKILLS

Data Analysis

Data Wrangling

Data Preprocessing

IoT

NLP

Machine Learning

Data Analysis

Android

SQL

Computer Vision

Full Stack

Rancher

Docker

## ONLINE PROFILES



<https://github.com/RashbirSingh>



<https://dockr.ly/3fwetzi>



<http://bitly.ws/93cv>



<https://rpubs.com/Rashbir>



## WORK EXPERIENCE

June'20 - Present

### Lend Me a Hand Pty Ltd, Sidekicker

*Data Analyst and Python developer*

- Working as a product developer.
- Successfully developed web-app using Django and full stack.
- Used Spacy and NLP for analysing PDF documents.
- Successfully deployed a user friendly webapp that analyse and highlights the important information in the PDF.
- Used AWS, Python, SQL, Full stack on a linux machine.

Aug - Dec'19

### CRMNEXT

*Junior Engineer - Data Analyst*

- Facilitated python-based AutoML for regression, classification, and clustering with different scoring metrics.
- Built Linux and windows server cluster using rancher with multiple nodes running docker images.
- Developed a pipeline for the preprocessing and data manipulation using Java on the Apache Beam framework.

*Graduate Engineer Trainee - Data Analyst*

Jan - Aug'19

- Developed an algorithm for captcha braking using headless selenium, OCR and Regex for data scrapping.
- Programmed project based on unstructured data extraction, wrangling, and analysis for training the NLP based model.
- Developed chatbot knowledge-creating using PDF documents.
- Utilized Pillow, OpenCV and OCR for edge detection and reading data from PDFs.

June - July'18

### DESIDOC, DRDO

*Data science research trainee*

- Worked as a data science intern.
- Researched various machine learning algorithms.
- Worked on Computer vision and trained an AI-based self-driving car.
- Proposed research on the comparative study of the clustering algorithm for the analysis of GPS data under the guidance of DESIDOC head scientist, Dr.Yusuf Ansari.



## EDUCATION

Feb'20 - Present

### RMIT Univeristy

*Melbourne, Australia*

*Master of Data Science*

June'15 - June'19

### Amity School of Engineering and Technology

*Noida, India*

*Bachelors of Technology, Information Technology*

# OPERATING SYSTEMS

- Mac OSX ☒ ☒ ☒ ☒ ☐
- Linux ☒ ☒ ☒ ☒ ☐
- Windows ☒ ☒ ☒ ☐ ☐

# CERTIFICATION

- Applied Data Science with Python.
- Joy of computing using Python.
- Python Programmer for Data science.
- Data Analyst with Python
- Statistics with Python
- Programming with Python
- BlockChain and Bitcoin
- IoT Certification
- Java Programming
- C Programming

# ACHIEVEMENTS

- Cash Prize of Rs.9000 IET - PATW 2018.
- Best Project Presentation at APPTeC 2018.
- Cash prize of Rs. 25,000 at RENEW EnvironmrnD.
- Cash Prize of Rs.8000 at IET - PATW 2017.
- Cash Prize of Rs.7000 at Technotronics 2018.
- Certificate of achievement from MRS.
- Best Project Presentation at APPTeC 2017.
- Best Start-Up Idea at APPTeC 2017.

# INTERESTS

- Internet of things(IOT)
- Artificial Intelligence
- Machine learning
- Deep learning
- Image processing
- Natural language processing
- Brain computing
- Robotics
- Micro controllers/Processors

# HOBBIES



## PUBLICATIONS

Jan, 2020	<div><div></div><div><b>Self-Power Generating Indoor Air Purifier Robot</b> <i>R. Singh, GK. Chadha, V. Deep, D. Mehrotra</i> <i>International Journal of Computing and Digital Systems ISSN (2210-142X)</i> <i>URL - <a href="https://journals.uob.edu.bh/handle/123456789/3702">https://journals.uob.edu.bh/handle/123456789/3702</a></i></div></div>
Jan, 2020	<div><div></div><div><b>Applying data mining to detect the mental state and small muscle movements for the autistics (ASD)</b> <i>R. Singh, P. Singh, and L. Kharb</i> <i>Recent Paradigms of Deep Learning &amp; IoT in Healthcare Systems</i> <i>URL - <a href="https://bit.ly/2u2Eeoz">https://bit.ly/2u2Eeoz</a></i></div></div>
Jan, 2020	<div><div></div><div><b>Proposing Real-Time Smart Healthcare Model Using IoT</b> <i>R. Singh, P. Singh, and L. Kharb</i> <i>Internet of Things Use Cases for the Healthcare Industry, Springer Nature Switzerland AG (2020)</i> <i>URL - waiting</i></div></div>
Oct, 2019	<div><div></div><div><b>Role of Machine Learning in Modern Education and Teaching</b> <i>P. Singh, R. Singh, and L. Kharb</i> <i>Impact of AI Technologies on Teaching, Learning, and Research in Higher Education</i> <i>URL - waiting</i></div></div>
Oct, 2019	<div><div></div><div><b>Smart Nursery with Health Monitoring System through Integration of IoT and Machine Learning</b> <i>R. Singh, P. Singh, and L. Kharb</i> <i>AI and IoT-Based Technologies for Sustainable Farming and Smart Agriculture - IGI Global Book</i> <i>URL - waiting</i></div></div>
Feb, 2019	<div><div></div><div><b>Electricity Generating and Monitoring System using IoT</b> <i>R. Singh, V. Deep, D. Mehrotra</i> <i>IET - Smart Cities Symposium 2018, Bahrain</i> <i>URL - <a href="https://bit.ly/2Sf7gco">https://bit.ly/2Sf7gco</a></i></div></div>
Jan, 2019	<div><div></div><div><b>Analysis and Visualization Model for a GPS Dataset of Moving Vehicle</b> <i>R. Singh, GK Chadha, P. Sharma, V. Deep, D. Mehrotra</i> <i>IET - Smart Cities Symposium 2019, Bahrain</i> <i>URL - <a href="https://bit.ly/2Sf7gco">https://bit.ly/2Sf7gco</a></i></div></div>
Jan, 2019	<div><div></div><div><b>"VISIO": An IoT Device for Assistance of Visually Challenged</b> <i>R. Singh, P. Singh, and L. Kharb</i> <i>International Conference on Emerging Trends in Electro-Mechanical Technologies and Management, TEMT 2019</i> <i>URL - Waiting</i></div></div>
Mar, 2018	<div><div></div><div><b>Prosthetic arm controlled using mind-waves called Mind-Your-Arm</b> <i>R. Singh</i> <i>International Journal of Advance Computational Engineering and Networking (IJACEN)</i> <i>URL - <a href="https://bit.ly/3b6Fck0">https://bit.ly/3b6Fck0</a></i></div></div>
Dec, 2018	<div><div></div><div><b>BDT3V - A technique for big data testing considering 3V's</b> <i>A. Bhardwaj, R. Singh , V. Deep, P. Sharma</i> <i>2018 Second International Conference on Green Computing and Internet of Things (ICGCIoT)</i> <i>URL - <a href="https://bit.ly/2uTy5eg">https://bit.ly/2uTy5eg</a></i></div></div>

## REFERENCES

Available on request



Oct, 2018

### Electrogen Glenovator

India

Patent Number - 201811026609



## PROJECTS

Nov'18 -  
Feb'19

### Mind Controlled Appliances and Switches

Developed 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.

Nov'17 -  
Jun'18

### Learning Teaching device for ASD patients

Verified which technique of data mining would provide us with the most accurate for the prediction and classification of mental state of mind and small muscle movements using the electromagnetic brain waves signals generated in our brain neurons 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.

Jan'18 -  
Mar'18

### Electricity Generation and Air purification robot

We used three sources of electricity generation 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 with android application support to control and receive real-time data over Bluetooth.

Jun'17 -  
Aug'17

### Voice Innovation Project

Developed a customer calling based AI assistant which can answer customer queries, create user database, store information and give personalized answers to questions, using Amazon Alexa and Google Assistant for the company called MRS. In a collaboration project between Amity University, Noida and 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.

Mar'17 -  
Jun'17

### Mind controlled robotic arm

Utilized 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.

Mar'16 -  
Jun'16

### Walking system for visually impaired - Techeye

Utilized 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 the scanning area of the user and recommend the best path based on the usage of other users.