

# RAHUL KANOJIA

rlrahulkanojia@gmail.com +91-8168869769 | New Delhi

• GitHub: //rlrahulkanojia

• LinkedIn: //rlrahulkanojia

## EDUCATION

### D.S.B International Public School

RISHIKESH, INDIA

Percentage – 90%

### B. TECH (CSE)

06/2016 – 05/2020

University School of Information, Communication

And Technology, New Delhi, India

CGPA – 8.0

## CERTIFICATIONK

### COURSERA

- Deep Learning Specialization
- Regularization and Optimization
- Structuring Machine Learning Projects
- Convolutional Neural Networks
- Sequence Models
- Kubernetes Deployment

## SKILLS

### LANGUAGES AND LIBRARIES

#### LANGUAGES

- C++
- Python

#### LIBRARIES

- PyTorch
- TensorFlow
- Keras
- Google Cloud Platform
- AWS
- OpenCV

## NGO

- Volunteer and Mentor at UMANG (IEEE USICT Initiative to teach young children about technologies. Focused on government schools.)
- Innovation Mentor for conducting Hands-on Electronics Experiential Training for an all-girls batch at 'Teach for India (TFI)' Ayanagar camp. (15th February 2018)
- Volunteer for Mash Project 2017 - MASH Project is a youth-led organization, working to create an ecosystem for young social change-makers.
- Volunteer for WERP India
- State Bank Of India YFI

## EXPERIENCE

### UNREAL.AI | DEEP LEARNING RESEARCHER

OCTOBER – 2019 – Present

- Working on projects based on face recognition and object detection
- Worked
- on training and deployment of state-of-the-art models on edge devices. (Raspberry Pi4, Raspberry Pi3, Jetson Nano, Orange Pi).
- Worked on Single Person and Multi Person Pose Detection and Applications
- Working on Research Papers and Projects with partners like IIT Delhi.

### RYDEU | DEEP LEARNING ENGINEER (Remote)

SEPT-2019 – NOV 2019 | Berlin, Germany

- Working on the problem of image based virtual try-on systems for fitting a new in-shop cloth into a person image.
- The input is pair of the images of the person and the cloth. The output is the fitted image of the cloth on the person.
- Designing the image based try on pipeline towards the characteristics preserving image generation including new modules while trying out various architecture like U-NET and VGG19 and custom variant of these architecture, trying out different loss function like VGGLoss and L1 Loss with suited optimizers like Adam, SGD and Regularization techniques like L1 to obtain fidelity try-on results
- Trained the models in multi GPU setting. Modularized the entire codebase and following the object-oriented programming principle, used multi-processing for efficient inference.

### INNOVACCER | SOFTWARE DEVELOPER

Jun 2019 – Jul 2019 | Noida, India

- Worked on a problem to Clean and segregate US Healthcare data using natural language processing and used AWS servers for deployment.
- The data had pre-defined schemas and criteria, using that we built a machine learning model which was able to predict the results with 96% accuracy.
- Optimized the model by trying out various feature extraction, optimizers and ensemble of techniques like Random Forest, Decision trees, XG-Boost etc.

## **BANAAO | MACHINE LEARNING RESEARCHER**

### **March 2019 – Present**

- Actively involved in the field of Artificial Intelligence and Machine learning.
- Helping the students of young age by providing an interactive and structured learning to invoke interest and curiosity among students.

## **ACHIEVEMENTS**

### **Smart India Hackathon - 2017**

Made an android app for farmers to aid them in transporting and Storing food and fertilizers. Got selected in top 8 teams.

### **Smart India Hackathon - 2018**

Made Website. Android app to aid both farmers and other users to locate the water resources around them and predict approximated rainfall and groundwater level, all using machine learning Algorithms. Won Innovation Award.

### **VLSID Conference 2019**

Were awarded entry to VLSID conference on being top 2 teams in 24-hour Cadence Tensilica Hackathon at IIT Delhi.

### **Delhi Section Congress – 2017 (IEEE)**

Won Best Presentation Award

### **Delegate at Harvard US India Initiative 2020**

A diverse community that has demonstrated leadership, excellence, and a commitment to carrying India forward.

## **POSITIONS OF RESPONSIBILITY**

- Project lead during Summer internship at Innovaccer
- Judge and Mentor in Hack Delhi- Hackathon
- Training and Placement Head (CSE Batch 2020)
- Chair of AI society of USICT
- Member of Infoexpression (USICT TECHFEST) Organizing
- Vice Chair-Person of IEEE USICT
- Technical Head of IEEE Student Society

## **RESEARCH PROJECTS**

### **REFDAR** **March 2019 – May 2019** **(Real-time Efficient Face Detection and Recognition)**

- Worked on a problem to create a powerful yet compute efficient face detection and face recognition system.
- Created a pipeline using state of the models like FaceBoxes and Facenet.
- Implemented real-time training of new faces and improved the accuracy using image enhancing techniques.

### **SPELLING BEE CHALLENGE | INDIVIDUAL PROJECT**

#### **Feb-Mar 2019**

- Worked on a problem to create spelling of a word with the help of the phenome of the word.
- The input of the model was a phenome and output was to be correct spelling of the word.
- Created the model using LSTM and GRU, along with seq2seq loss and Adam Optimizer.
- Achieved an Precision of 96%

### **IMAGE HUNT | TEAM PROJECT**

#### **Nov 2018**

- A novel App to use object recognition in a game of Treasure Hunt
- Designed the pipeline while using Mask-RCNN for object detection and classification and used transfer learning to train on our own dataset.
- Implemented various data augmentation techniques to increase the dataset size, used learning rate schedulers like cyclic, poly, step etc.

### **ALL INDIA RAINFALL PREDICTOR | TEAM PROJECT**

#### **Dec 2017 - May 2018**

- Smart India Hackathon 2018 – Predict the rainfall (mm) using deep learning method in all the states of India.
- A project was a blend of Android Development, Web Development and Machine Learning using LSTM and Time Series Forecasting.
- Input is a collection of the records of the rainfall in different parts of the India and the output is the predicted amount of the rainfall in any part of India.
- Accustomed with the needs of the farmers for the efficient use.
- Distribution of the seed type can be controlled to increase the yield and help farmers.