# Ashutosh Chaubey

Computer Science Junior

#### Areas of Interest

Deep Learning, Machine Learning

#### Education

- 2017 2021 **Bachelor of Technology**, *Computer Science and Engineering*, Indian Institute of Technology, Roorkee.
  - I Semester CGPA 9.81/10.0
  - II Semester CGPA 9.83/10.0
  - III Semester CGPA 9.78/10.0
  - IV Semester CGPA 9.78/10.0
  - V Semester **CGPA** 9.69/10.0
  - 2017 All India Senior School Certificate Examination, Delhi Public School, Bhilai, 97%. (Central Board of Secondary Education)
  - 2017 All India Secondary School Examination, Delhi Public School, Bhilai, CGPA 10.0/10.0. (Central Board of Secondary Education)

#### **Publications**

2019 A GAN based Ensemble technique for Automatic Evaluation of Machine Synthesized Speech, Published in the 5th Asian Conference on Pattern Recognition (ACPR), Auckland, New Zealand.

## Internships

May 2019 - July Machine Perception of Human Pose using Deep Neural Networks, Video Analytics Lab, 2019 Indian Institute of Science, Bengaluru.

Human pose prediction on synthetic dual person video dataset

### **Projects**

2019

Jan 2020 - Present Explainability of Neural Networks in Video Classification, under Prof. R. Balasubramanian.

- Performing occlusion sensitivity on neural networks trained for Video Classification

Jan 2019 - April Automatic Evaluation of Machine Synthesized Speech, under Prof. R. Balasubramanian.

— Using a Generative Adversarial Network based network to evaluate machine synthesized speech

Feb 2019 Variational Autoencoder for MNIST, O.

— Implemented the Auto-encoding Variational Bayes paper using pytorch framework

- Compared and analysed the proposed method against current evaluation techniques

- Carried out experiments with the generations using MNIST dataset
- Dec 2018 One shot learning using Siamese networks, Q.
  - Implemented "Siamese Neural Networks for One Shot Image Recognition" paper in pytorch framework using omniglot dataset
  - Done experiment with different optimizers and train/test split
- Nov 2018 Classifying Names with Character level RNN, Q.
  - Trained a classifier using vanilla RNNs which can classify the nationality of person based on his name

#### Academic Achievements

- 2017 Secured All India Rank 402 in JEE-Advanced out of 0.2 million candidates
- 2017 Secured All India Rank 575 in JEE-Main out of 1.2 million candidates
- 2017 Secured place among National Top 1% in National Standard Examination in Chemistry and National Standard Examination in Physics
- 2016 Shortlisted for the Kishore Vaigyanik Protsahan Yojana Fellowship award
- 2015 Awarded National Talent Search Examination Fellowship by NCERT under the HRD ministry, Govt. of India

Positions of Responsibility

Skills

Languages

Computer Python, C/C++, Java

Software Packages Tensorflow, Pytorch, Matplotlib, Scipy, Numpy, Opencv-python, Node.js, Django

References

Dr. R. Venkatesh Associate Professor, Indian Institute of Science, Bangalore

Babu

Dr. R. Professor, Indian Institute of Technology, Roorkee

Balasubramanian