

# Rishav



rishkumar2345@gmail.com



+91 9205229294



rish-av.github.io

## Education

B.E.(Hons.) Computer Science | BITS Pilani | 2020

Senior Secondary (Class XII)  
Chinmaya Vidyalaya Bokaro | 2016

## Skills

Languages: Python, C++, C, Java  
Frameworks : Tensorflow, PyTorch

## Extra-Curricular

Senior Member @ BITS-ACM  
- Senior member at student chapter of ACM, BITS Pilani, Involved in Machine Learning Special Interest Group

Project Leader @ GyanBodh Harinagar, Nirmaan Organisation  
- Introduced Activity based learning amongst the kids in Harinagar community & taught rural school kids

Blogger @ Quora  
- Active writer on Quora, mostly write about topics related to higher education and AI

## Experience

- May-Jul'20 Computer Vision Intern Chloropy Tech. Singapore  
Working on unsupervised learning algorithms for monocular depth estimation from drone images.
- June-Dec'19 Bachelor Thesis DFKI, Kaiserslautern(Germany)  
Worked on Deep Learning for Scene Flow Estimation in Autonomous Vehicles under Prof. Dr. Didier Stricker for my bachelor thesis, parts from the work were accepted at *ICPR-2021* & *IROS-2020*
- Apr-Aug'18 ML Engineer Pixxel, Bengaluru  
Worked on deep learning algorithms for cleaning and useful band extraction from hyperspectral images. Implemented HSID-CNN for the same.
- Jan-May'19 Research Assistant CEERI Pilani  
Worked on two projects, semantic segmentation of power-lines in aerial images & machine learning algorithms for structural health monitoring.

## Publications

- [1] Rishav\*, Ramy Battarawy\*, Et al. "DeepLiDARFlow: A Deep Learning Architecture For Scene Flow Estimation Using Monocular Camera and Sparse LiDAR at IEEE/RISJ-IROS 2020, Las Vegas, NV, US
- [2] Rishav\*, René Schuster\*, Et al. "ResFPN: Residual Skip Connections in Multi-Resolution Feature Pyramid Networks for Accurate Dense Pixel Matching at IEEE-ICPR 2020, Milan, Italy

## Academic Projects

- Jan-May'20 Visual Commonsense Reasoning BITS Pilani  
Worked on deep learning algorithms for visual commonsense reasoning. Applied a new attention mechanism.
- Jan-May'19 Compiler Construction BITS Pilani  
Constructed a compiler for a given language specification in C language, this included the development of lexer, parser, semantic-analyzer, code-generator
- May'20 Active Learning BITS Pilani  
Implemented active learning algorithms for digit recognition, tested various techniques like Query by committee & uncertainty sampling

## Achievements

- May'16 JEE Mains Govt. of India  
Obtained an all India percentile of 99.90 out of 1.2 million candidates.
- May'14 National Talent Search Exam Govt. of India  
One amongst 4,000 people selected for the scholarship out of 0.5 million candidates.
- May'16 BITSAT 2016 BITS Pilani  
Obtained a score of 390/450 in BITSAT, test for admission to BITS Pilani.

## Coursework

- Comp. Sc Data Structures and Algorithms, Design and Analysis of Algorithms, Operating Systems, Database Management, Neural Networks and Fuzzy Logic, Machine Learning, Compiler Construction, Object Oriented Programming, Pattern Recognition
- Mathematics Linear Algebra, Probability and Statistics, Differential Equations, Integral Calculus, Graph and Networks, Discrete Mathematics