

# Rohan Lekhwani

[ronlek.github.io](https://ronlek.github.io) | F-9/14 Hermes Heritage 2, Yerwada, Pune



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RonLek



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## EDUCATION

**Indian Institute of Information Technology, Pune**  
**Class of 2021**  
**BTech in Computer Science and Engineering**  
**CGPA - 9.02**

Relevant courses and work:

- Python Programming
- Machine Learning
- Game Theory
- Data Structures and Algorithms
- Machine Learning (Stanford University)
- Convolutional Neural Networks for Visual Recognition (Stanford University)

**Army Public School, Kirkee, Pune**  
**Class of 2016**  
**Intermediate**  
**Aggregate - 87.6%**

**Hutchings High School, Pune**  
**Class of 2014**  
**Matriculation**  
**Aggregate - 95.17%**

## SKILLS

**LANGUAGES:** Python, Java, C/C++, HTML/CSS, Javascript.

**FRAMEWORKS:** Tensorflow, Scipy stack, OpenCV

**DATABASE:** SQL, MongoDB

**SOFTWARE:** Google Cloud, Anaconda, MATLAB, Android Studio, Git, AutoCAD.

## HONORS

Best Innovation Award in Computer Science, UILA 2020.  
Top 1% in Missing Hackathon out of 2500 participants.  
All India Rank 27 and city rank 1 in NEST - 1, 2017  
Ranked in the 0.39% out of 1.3 million candidates in JEE 2017.

## PUBLICATIONS

**FastV2C-HandNet: Fast Voxel to Coordinate Hand Pose Estimation with 3D Convolutional Neural Networks**  
**Rohan Lekhwani, Bhupendra Singh**  
To appear in Advances in Intelligent Systems and Computing, Springer

## INTERNSHIPS

**Defence Research and Development Organization (DRDO)** **New Delhi, India**  
**Research Intern** **Dec,18 - Jan, 19**  
Built a deep learning model to predict landslides with an accuracy of 94% between Rishikesh(India) and Gangotri(India). The geospatial data was extracted using QGIS and gdal, cleaned and then fed to the network designed.

**Centre for Development of Advanced Computing (C-DAC)** **Pune, India**  
**Project Intern** **Jul,18 - Aug, 18**  
Worked under the Graphic and Intelligence Script Technology group to build a full-fledged NodeJs application with feedback mechanism to translate website contents from English to regional languages and vice versa. Used a MongoDB backend to store the results.

## PROJECTS

**Collision Avoidance in Non-Communicating Multi-Agent Systems**  
Remodeling collision avoidance algorithms using deep reinforcement learning in multi-agent systems to research an improvement over existing algorithms.

**Style Transfer for Anime Colorization using GANs**  
Working on engineering a model to colorize anime sketches based on a style image using a Generative Adversarial Network (GAN) mechanism.

**3D Hand Pose Estimation from Depth Images**  
Keras based model to predict 3D hand joint locations from 2D depth images using an encoder-decoder mechanism. The model uses a voxel-to-voxel based approach to predict a per-voxel likelihood heatmap for joints. Trained the model on Google Cloud using an NVIDIA Tesla P100 GPU. Mean 3D distance error - 8.42mm. This approach is based on the paper - V2V-PoseNet by Gyeongsik Moon et al.

**IIIT Pune App**  
Used a Firebase backend to create an Android App for the Institute. Includes a novel way to issue books by scanning barcodes using camera intents. Other features include - live mess menu, bulletin board, an in-app discussion forum for students and notification support. The app registered more than 100 downloads within a day of its release. More than 100, 5-star reviews on Play Store. Current rating - 4.9.

**B(V)ideo Player**  
Built an open-sourced video player in JavaFx that provides speed increase, skip and full-screen mode features. Supports videos of MP4 format. Code available on GitHub.

## ACTIVITIES

**Volunteer, Teach For India** **2019**  
Taught 10<sup>th</sup> graders English and Math. Coached students for National Cyber Olympiads.  
**Head, Codechef Campus Chapter** **2017 - Present**  
Started InfInTy - the first inter-college competitive coding competition of IIIT Pune. Held annually with more than 2000 submissions made over the globe every year.