

# Pranav Gupta

☎ (+91) 8077653998, 8629015392

✉ pranavgupta4321@gmail.com

📁 pranavgupta1234.github.io

🌐 LinkedIn @ pranavgupta1234

## Education

2015–Present **IIT Mandi - B.Tech in Computer Science and Engineering**, *Himachal Pradesh*.  
Current CGPA : 8.87

2013–2015 **Anand Swaroop Arya Saraswati Vidya Mandir**, *Roorkee*, Uttarakhand.  
Intermediate : 95.20 % | High School : 10 CGPA

## Courses

Core Data Structure and Algorithms, Computer Organization, Paradigms of Programming.  
OS and Communicating and Distributed Processes, Large Application Practicum, System Practicum.  
Networking  
Database Database Practicum, Information and Database Systems.  
AI Fundamentals of Artificial Intelligence, Pattern Recognition(ML), Deep Learning.

## Work Experience and Projects

June–August **Samsung Research Intern (SRI-D)**, Voice Classification.  
2018 Developed a light weight model capable of running on low end hardware which could predict gender, emotion, based on an audio note. *Python/C++/keras/tensorflow*

April - May **Naive File Encryption in Linux**, *Kernel Source*.  
2018 Tweaked read and write system calls in kernel source to implement on-the-fly file encryption(substitution cipher). Worked at VFS layer of kernel and used extended file attributes for tagging a file with encryption as well as for password protection. *Kernel/C*

April - May **DoS Attack Prevention in PostgreSQL**, *Database Management*.  
2018 Dived into large code base of PostgreSQL (written in C) and logged incoming queries into a separate file and then checked for relative similarity from last n queries at parser stage of query processing in order to take further decision on query. *C/SQL*

Dec 2016 – **Object Detecting Autonomous Quadcopter**, *ML, Object Tracking and Detection*.  
June 2017 Used Raspberry Pi as a video streaming server. Generated data stream was sent to a remote PC on which object detection and tracking task was completed. GPS was installed for tracking purposes and Gimbal was also attached to provide stability to the camera. *C++/Python/Ardupilot*

Dec 2016 – **HP Police Assistant**, *Android Application*, Himachal Pradesh, Mandi.  
June 2017 To collect and organize data of various vehicles passing through police checkpoints and automate the task of taking Challan for those who break traffic rules. Google Location API integrated to track the location and Google Firebase (BaaS) for backend data management and storage. Optimizing performance by using third party libraries like Picasso for image caching. *Java/Android/Firebase/BaaS*

## Programming Skills

Intermediate C, C++.  
Basic Java, Python, MySQL.

## Google Play Developer : ReactiveApps

Image Utility application to reduce the size of images (Rating : 3.5 , Downloads > 5000).  
Compressor  
ODK Contributed to Open Data Kit (open source application for data collection).