# **Priyansh Gupta**

Undergraduate (2019 - 2023) Computer Science & Engineering

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## Links

Github:// MyGithub LinkedIn:// MyProfile Blog:// MyBlog

# **Skills**

OS

GNU/Linux, Windows

**LANGUAGES** 

C/C++, Python, Dart(For Android Dev)

FRAMEWORK MERN-stack, Flutter, Pytorch

DATABASES MySQL, Firebase, MongoDB

MISCELLANEOUS Linux, Git, Bash, Opengl/Webgl

### Coursework

Data Structures and Algorithm
Machine and Data Learning
Linear Algebra
Operating Systems
Data Analysis and DBMS
Quantum Information and Computing

### Education

2019-2023 B.TECH. IN CSE IIIT-Hyderabad CGPA: 8.54/10

# **Self Learning Projects**

JOB-EASY Mern-stack web-app Very similar to 'LINKEDIN'

COMPTER GRAPHICS AND VISION Opengl and Webgl game, 3-D mesh, image processing, feature detection(SIFT), smoothing, seam-carving. CNN for MNIST and Cifar-10. Image compression using PCA, SVD and autoencoders.

# **Experience**

# 2021-PRESENT Centre for Visual Information Technology, IIIT-Hyderabad Honours

CVIT lab at IIIT-H works in various domains of computer graphics and computer vision like automated cars, medical equipment, etc.

Computer Vision , Machine Learning , Computer Graphics Algorithm and Tools

#### JULY 2021-PRESENT Boltzmann Labs

ML Intern

**Android Intern** 

'BoltBio' is a Target Discovery Accelerator developed to aid researchers, extract potential targets for a specific disease. Working on improving the deep learning model for this tool by trying various techniques mentioned in different-different research papers by drug discovery researchers across the world. Analysis of QM9 data-set.

Pytorch, Neural Networks, Data analysis, Python, Numpy

## FEB 2021-APRIL 2021 UrbanRider, Hyderabad, India

Designed and developed a blood donation app from the scratch which has chat feature, Live location sharing using google maps api and have credit point system which can be used by the user to ask for blood at any blood bank in Hyderabad.

Flutter, Firebase, Google map

# **Academic Projects**

# **Chess/Quantum Chess Engine**

Java, Game Theory

A chess engine made using min-max algorithm and different techniques like heat map and chess-logic for position evaluation. Openings were stored in a tree data structure. For quantum chess, used Hadamard and CNOT gates for transition of pieces between their classical and quantum state. Also did a bit of research on how machine learning can be used in deciding moves and tried to predict the move in a position using deep learning neural network by training it on the positions available in database.

#### C-Shell

**Operating System, System Calls** 

A BASH-like shell, where basic commands like Is, cd, echo, history, ps, etc. are implemented. This shell also supports redirection and pipelining. Several shortcuts like, for sending SIGKILL signal, exiting shell, etc are also implemented.

#### **DBMS for Sales and product quality analysis**

MySql

Designed a database management model which keeps track of all the purchases in a given region. This model helps in keeping track of total production of all the factories and provides all the necessary information to the customers so that they can easily lodge complaints against fraud or broken products. Model was optimized by following all the normalization steps.

#### **Brick-Breaker Game**

**Python, OOPS concepts** 

Terminal game written by following all the good coding practices and OOPS concepts.