## Education

NSIT(Netaji Subhas Institute of Technology), New Delhi

August, 2015 - PRESENT

B.E. in Computer Engineering

Kendriya Vidyalaya, Tagore Garden, New Delhi

April, 2013 - April, 2015

High School

# Skills\_

• Programming Languages: C, C++, Java, C#

• Scripting Languages: Bash(basic), Python(basic)

• Operating System: Windows, Linux (Ubuntu)

• IT Constructs: Data Structures

• Database Management System: MySQL

• Frameworks, Tools & Libraries: Qt, Android Studio, Qt Creator, OpenCV, CodeBlocks, Numpy

# Projects \_

#### **Finger-Paint**

- A desktop app that lets you draw on screen by tracking colored strips worn on fingers.
- App allows editing existing images and saving images.
- Built With: C++, Qt, OpenCV

## Image Sudoku Solver

- An application that takes in image of newspaper sudoku, and then solves it using image processing and machine learning.
- Image processing techniques like contour detection and morphology are used to extract sudoku grid from image, and then cells from the grid
- Built With: C++, OpenCV

#### Graphiculator

- A console application that plots graphs of mathematical expressions.
- Uses 'Shunting Yard Algorithm' by Edsger Dijkstra. Modified to work for trigonometric functions.
- Built With: C++

#### **Chess Game**

- A two-player GUI chess game implementing all major OOP concepts. Shows possible moves with help of techniques like backtracking and greedy approach.
- Built With: Java

#### ToDo App

- An android todo app to maintain and schedule your work.
- Built With: Java, Android, MySQL

# Achievements \_\_\_\_\_

- 2017 Snackdown 615 / 21038 (Team unsignedint), Codechef's annual coding competition
- 2017 June Long Challenge 295 / 9130 (Handle: rohanbalot), Codechef
- 2017 Country Rank 1600 / 87877, Codechef
- 2017 Purple Rated (Max rating 1913, Handle: rohanbalot), Codechef