# **Shubhang Sati**



Roll number: 2016198 DOB : September 3, 1998

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Dabri-Palam Road, New Delhi-110045 Github: https://github.com/shubhangsati

**Education** 

Indraprastha Institute of Information Technology, Delhi CGPA: 7.02

B.Tech.(ECE) 2016 - Present

**Dwarka International School, New Delhi** Percentage: 93

CRSF

2015 - 2016

Dwarka International School, New Delhi CGPA: 10

CBSE

2013 - 2014

Skills

Computer Graphics, Web Development, Data Structures and Algorithms **Expertise Area** 

**Programming** Language

Python, C++, Java, JavaScript, C#, Verilog, MATLAB

**Tools and Technologies** 

jQuery, Flask, HTML5, CSS3, Arduino, FPGA Programming, Unity3D, Unreal

Engine, OpenGL

Virtual Reality, GPU Computing, Computer Vision, Computer Graphics, **Technical** 

**Electives** Foundations of Computer Security, Competitive Programming 2/1, Graph Theory,

Embedded Logic Design, Advanced Programming

**Internships** 

**Codechef Summer Programming Camp Trainer** (May,19 - Jun,19)

I was one of the trainers at the codechef summer programming camp for school students. I was responsible for creating lesson and session plans and

teach the basics of computer programming to school students.

**Commonlounge** (Industrial) (Aug, 18 - Sep, 18)

Guide: Keshav Dhandhania Team Size: 1 Commonlounge is an educational platform with wiki-based bite-sized tutorials.

I created a complete beginner programming course on JavaScript. I was

responsible for creating the course structure and content as well.

https://bit.lv/2V9OWRi

M19G (Industrial) (May, 18 - May, 18)

Guide: Kibeom Kim Team Size: 3 A web platform using which people can create games on the web using

Python and share with others. The tech stack included C++, MicroPython, Emscripten, Polymer, NodeJS, Cassandra and BabylonJS. I worked on

developing MicroPython APIs for the game environment.

Maadhyam (Industrial) (April, 18 - April, 18)

Guide: Maansi Verma Team Size: 1

Maadhyam is a platform to enable stakeholder engagement with policy

making. I worked on the front-end of their web platform.

**Mojoland** (Industrial)

Mojoland is an amusement park. I redesigned and made their website. (July,17 - Aug,17)

https://shubhangsati.github.io/moioland2/ Team Size: 1

#### **Projects**

## 3D scene creation using cartoon sketches

Guide: Dr. Ojaswa Sharma

We made an application that allows users to convert their hand-drawn cartoon sketches into 3D models. Users can also create a 3D scene using such objects and place them around the scene using hand gestures.

(Mar, 19 - Apr, 19) Team Size - 3

## **Efficient Random Number Generation**

Guide: Dr. Oiaswa Sharma

This project demonstrated the efficiency of GPUs to generate pseudo-random numbers. We compared sequential and parallel implementations of several PRNGs. We also estimated the value of pi using the generated random

(Mar, 19 - Apr, 19) Team Size - 2

numbers.

### **Secure Banking System**

Guide: Dr. Arun Balaji Buduru

A "secure" web app for an online banking system. This was a part of the "Foundations of Computer Security" course.

https://github.com/shubhangsati/secureBankingApplication

Team Size - 4

(Sep, 18 - Nov, 18)

## **3D Campus Reconstruction**

Guide: Dr. Ojaswa Sharma

The objective of this project was to create a 3D model of the campus and a software that renders this model and allows the user to walk through the virtual campus. I was responsible for programming a drone to click pictures of the entire campus and construct the model from these pictures. https://github.com/oiaswa/2018 CSE333 Project Team1

(Oct, 18 - Nov, 18) Team Size - 4 / 13

#### **Audio Encryption/Decryption System**

Guide: Dr. Anubha Gupta

A system to encrypt audio signals into images and then decrypt them. It uses the Python Image library to read and write images. https://github.com/shubhangsati/SNS\_Project

(Oct,17 - Nov,17) Team Size - 3

#### **Chain Reaction Clone**

Guide: Dr. Vivek Kumar

Clone of the popular game Chain Reaction. It was made using the JavaFX framework. It is a strategy game for 2-8 people. The objective is to eliminate opponents' orbs and take control of the game board. https://github.com/shubhangsati/ChainReaction

(Sep,17 - Nov,17) Team Size - 2

#### **Image Map**

A web app that lets users upload multiple geo-tagged images and then plots the corresponding locations on the map. Backend is made in Django. https://github.com/shubhangsati/imagemap

(Apr,17 - May,17) Team Size - 1

## **Positions of Responsibility**

| • | Head of CSE Events, Esya 19  | (Apr, 19 - current) |
|---|--|---------------------|
| • | Lead Organizer, TEDxIIITD 19   | (Oct,18 - Mar, 19)  |
| • | Website Manager, TEDxIIITD 18  | (Dec,17 - Mar,18)   |
| • | Event Head, HackIIITD   Esya 17                                      | (May,17 - Aug,17)   |
| • | Volunteer: Student Induction 17, Jugaadathon, INOI Workshop, Esya 16 | (Aug, 16 - Aug, 17) |
| • | Head boy, Dwarka International School                                | (Aug,15 - Apr,16)   |

#### **Awards and Achievements**

• Honourable Mention, INOI, 2016

- World Rank 69, World Cup University level Codesprint, Hackerrank, 2015
- School Topper, Times NIE quiz, 2014
- **AIR 5**, NASA Astronomy Olympiad, 2013

Declaration: The above information is correct to the best of my knowledge.

Shubhang Sati Date: June 26, 2019