# Sahil Singh | 17CS10047

Computer Science and Engineering (B.Tech 4Y)

#### **ACADEMIC DETAILS**

Degree/Exam	Institute	Year	CPI / %
B.TECH	Indian Institute of Technology, Kharagpur	2017 - Till date	8.35 / 10
CBSE XII	Shiv Jyoti Senior Secondary School, Kota	2015 - 2017	90.6 %
CBSE X	Delhi Public School, Vindhyanagar	2013 - 2015	10 / 10

#### **COMPETITIONS**

#### • ACM ICPC 2019-2020

- o Ranked 50 at ICPC Asia Amritapuri Regionals 2020.
- o Ranked 66 among 4401 teams in ICPC India Regionals Online Round.

#### • ACM ICPC 2018-2019

- o Honorable mention at ICPC Asia Amritapuri Regionals 2019.
- Ranked 208 among 3282 teams from colleges across India in the online qualifiers.
- Part of the best ranked sophomore team from IIT Kharagpur.

### • Topcoder India Regionals 2019

- Qualified for Topcoder Open India Regionals on the basis of Algorithmic contests held regularly.
- Ranked 12 among 50 qualified in the Regionals.

#### Google Hash Code

National Rank 38 & 100 at Google Hash Code 2020 & 2019 respectively.

#### • Google Kick Start 2019

o Ranked 161 & 127 at Google Kick Start Round A & D respectively.

#### **INTERNSHIPS**

Google [4 May'20 - 10 July'20]

- Created an Android based Chat Application which interacted with servers deployed on GCP.
- The Application provided the user ability to send any plainText or richText message in real time.
- Designed & integrated all activities required for Login, Registration, viewing contacts & viewing Messages.
- Designed a client side cache which stored all downloaded richText content.
- Implemented all Network & Database operations on background threads to provide a smooth user experience.
- Handled behaviour of application during high latency by retrying network requests with an exponential back-off until any response is received, meanwhile showing an appropriate display to the user.

## International Institute of Information Technology, Hyderabad

[1 May'19 - 14 July'19]

- Researched on Game Theory under the guidance of Dr. Sujit P. Gujar, IIIT-H.
- Learnt concepts related to strategic games, Nash Equilibrium & mechanism design for different environments.
- Performed a critical analysis of various research papers related to auction design which were presented in recent conferences and found flaws in 2 of them which were agreed by the authors later on.
- Designed a mechanism which maximizes the seller's expected revenue when probability distribution of bidder valuations is imprecise.

### **PROJECTS**

### **E-governance System (VOTE),** Android based Application (Source Code)

[Jan'19 - April'19]

- Created an Application which provides a platform to the people for voicing out their concerns directly to the elected representatives of the concerned constituency & facilitates their efficient redressal.
- Designed all activities in Voter, Representative and Contractor Portals & integrated them with appropriate adapters.
- Managed transitions between all the activities and made sure that only data which is necessary is passed between
  activities to ensure optimum performance.
- Integrated the application with an SQLite database which stored all the data regarding users & complaints.

## AWARDS AND ACHIEVEMENTS

- Secured All India Rank 223 in Joint Entrance Examination (JEE) Advanced, 2017
- Secured All India Rank 94 in Joint Entrance Examination (JEE) Main, 2017

#### **EXTRA CURRICULAR ACTIVITIES**

- Won Gold medals at inter-hall football 2019 & Red Bull Neymar Jr's Five College Qualifiers 2020.
- Volunteered in a team of 30 for the welfare of 2 nearby villages under National Service Scheme, IIT Kharagpur.
- Part of Azad Hall's Athletics & Hockey team for the inter-hall tournaments.
- Member of Department feedback Committee which gives a collective feedback regarding teaching methodology, pace of the course & any other matter of concern of the batch to the teachers in monthly meetings.