

Antreev Singh Brar

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Department of Computer Science and Engineering

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Academic Qualifications

Year	Degree/Certificate	Institute	CPI/%
2019 - Present	B.Tech in Computer Science and Engineering	Indian Institute of Technology, Kanpur	9.72/10
2019	Class XII (CBSE)	LRS DAV Sr. Sec. Model School	92%
2017	Class X (ICSE)	Assumption Convent School, Abohar	94.8%

Achievements & Awards

- Awarded **Aditya Birla Scholarship** for being amongst top **15 CSE** candidates selected across all IITs
- Awarded **Academic Excellence Award** in academic year **2019-20** for exceptional performance in academics at IIT Kanpur
- Achieved **All India Rank 119** in IIT JEE-Advanced 2019 out of 245,000 candidates
- Achieved **All India Rank 179** in IIT JEE-Mains 2019 out of 1.3 million candidates
- Achieved **All India Rank 72** in KVPY 2019, Conducted by IISC and Gov. of India
- Among **top 1%** in **NSEC & NSEA** 2019, and qualified for **InChO & INAO** conducted by HBSCE in 2019
- Awarded **NTSE Scholarship** by the Gov. of India for being amongst top **1000** students across the nation

Work Experience

Sogage May'21 - Jul'21

Software Engineering Intern

- Sogage is a stealth startup, led by alums of The University of Chicago, building a new age Social-Media Management platform
- Implemented a data-fetcher from scratch using **Django REST framework** to publish social media account's data in GCP **Pub-Sub**
- Designed and implemented a robust data pipeline using **Apache Beam** from scratch to transform and store the data in **Big Table**
- Designed a common schema to harmonise data from all social media networks for storage in Big Table

Projects

GenCoin May'21 - Jul'21

Programming Club IIT Kanpur

🔗 Gen-Coin

- Developed a Centralised pseudo-coin system in GoLang for use in the IITK Campus
- Involved Database Management, User Authentication with Hashing & Salting and User Validation with JSON Web Tokens (JWTs)
- Various techniques such as concurrency, deadlock prevention were explored and implemented to keep transactions safe and quick

Prior-free Strategic Multiagent Scheduling

Jul'20 - Nov'20

Research Project under Prof. Swaprava Nath

📄 Research Paper

- Implemented an effective priority-based scheduling algorithm to maintain social distancing among visitors in a crowded store
- Proposed mechanism transformed the user-preference matrix into Linear Programming problem and designated delay (payment) to each allocation via Vickery-Clarkes-Groves (VCG) rule. Also utilized for the backend development of Mobile application **Doori**

IITKBucks

Apr'20 - Jul'20

Programming Club IIT Kanpur

🔗 IITKBucks

- Developed my own client for a custom **Blockchain based Cryptocurrency** using **NodeJS** and **ExpressJS**
- Efficiently implemented Multi-Threading for Block-Miner, that mines a block to run in parallel with the server and ngrok to propagate blocks and data among peers

Speech Ledger

Oct'20 - Nov'20

FlipkartGrid 2.0

🔗 Speech-Ledger

- Developed a custom pipeline for Background noise suppression, Speaker Segmentation & Diarization, and voice-to-text translation
- Fine tuned Dual-Signal Transformation LSTM Network for Real-Time Noise Suppression, Text-independent Speaker recognition module based on VGG-Speaker-recognition as Encoder and Speaker diarization based on UIS-RNN as Decoder to work synchronously

Competitive Programming

- **Codeforces** : [Handle: **wolfiee**] Maximum rating of **1929 (Candidate Master)**
- **Google Kickstart 2021** : Global Rank **488** in Round C among more than 10,000 participants

Technical Skills

Programming: C, C++, Python, Javascript, GoLang
Utilities: Git, Apache Beam, Bash, \LaTeX , Keras, Scikit-Learn

Development: Nodejs, ExpressJS, Django, SQLite, HTML
Exposure: Docker, Kubernetes, ReactNative, Verilog

Positions of Responsibility

- **Secretary, Academics and Career Council IIT Kanpur**
- **Secretary, Programming Club IIT Kanpur**
- **Student Guide, Counselling Service IIT Kanpur**