

SUDHANSHU BANSAL

☎ (91)9877239648

✉ sudhanshu.bansaliit@gmail.com

🔗 [Sudhanshu127](#)

🌐 [Sudhanshu Bansal](#)

EDUCATION

Indian Institute of Technology Kanpur

Btech Undergraduate

Department of Computer Science Engineering

July 2017 - Present

Overall GPA: 8.0/10

Netaji Model School

12th CBSE

2017

Percentage: 91%

Holy Family Convent School

10th ICSE

2015

Percentage: 94.6%

ACADEMIC ACHIEVEMENTS

All India Rank 155 JEE ADVANCED, 160,000 candidates

All India Rank 604 JEE MAINS 1.12 million candidates

KVPY scholar

WORK EXPERIENCE

Sprinklr, Gurugram

Team:Research Role:Backend

May 2020 - June 2020

- Patched official lucene queryparser for validating results without sending to elasticsearch
- Developed a java based MockJsonServer(returns a dummy json response) for a quick frontend-backend development configured with slackbot
- Created a multithreaded data collection java application with persistence and caching in kafka and hosting it with elasticsearch

Addverb Technologies,Noida

Speech to text

December 2018

- Using keras created neural nets trained to pick specific speech words from continuous speech mode.
- Researched on the performance of neural nets like CNN, LSTM-RNN and siamese-NN.

Summer of Code, IIT Kanpur

Full stack Developer

May 2018 - July 2018

- Created a web based platform for mentors and students to communicate based on an individuals interest.
- Created chat app using socket programming, database management using mongodb, created a dynamic website using angular

HACKATHONS

InterIIT TechMeet

December 2019

- Placed 6th amongst all IITs in the 24hr long "Capture the Flag" event

Okta Hackathon

March 2019

- Worked with okta api and created the front end for web in React

Codechef Hackathon in collaboration with Alibaba Cloud

September 2018

- Worked with Codechef API and created a problem suggestor web app for new programmers. Placed in top 10

PROJECTS

Reputation Networks

January 2020 - May 2020

Undergraduate Project under Swaprava Nath

- Designing a social network for clustering people based on non-quantitative features
- Designing a judgement system that would determine the various aspects of any non-quantitative art form

Internet of Things, Alexa Skill

May 2018 - July 2018

Programming Club IIT Kanpur

- Worked with various amazon services like Lambda, Alexa skill kit, Rekognition, SNS, S3 bucket, Dynamodb
- Created an app which reports the replaced objects in a video

Cyber Security

January 2018 - April 2018

Association of Computing Activities

IIT Kanpur

- Performed various Capture the flag based on BufferOverflow, Heap Overflow, Shell code injection, sql injection

COURSE PROJECTS

Reading Comprehension of Abstract Meaning

September 2020 - Present

CS779: Statistical NLP

- Assigning abstract words which are highly imperceptible or nonspecific within a given comprehension
- Evaluating the model that is trained on one definition, on another definition.

Designing Java Compiler

January 2020 - March 2020

CS335: Compiler Design

- Create a Lexer and Parser(LLstar) for Java8
- Created AST using antlr

Working with gemOS

August 2019 - November 2019

CS330: Operating Systems

- Implemented system calls like fork, mmap for mapping virtual memory to physical memory.
- Implementing read-write locks on shared memory for parallel hashing

Interpreter for OZ

August 2019 - November 2019

CS350A: Principles of Programming Languages

- Designed assignment store for immutable data
- Designing interpreter for threads and other data structures

RELEVANT COURSES

Programming : Data Structure and Algorithm, Algorithms2, Principles of Programming Languages

Systems : Operating Systems, Compiler Design, Designing Verifiable Secure Systems, Database Systems, Programming for Performance(i), Computer Organisation

Machine Learning : Intro to ML, Statistical NLP(i), Linear Algebra and Differential Equations

Computation: Discrete Mathematics, Probability in CS, Logic, Numerical Methods, Theory of Computation, Cryptography, Game Theory(i)

i :- Ongoing Course

TECHNICAL STRENGTHS

Computer Languages	C/C++(Proficient) , Java, Python, Javascript, Haskell
Web	MEAN, mysql, socket.io
Operating Systems	Ubuntu, Arch
Tools	ElasticSearch, Lucene, Kafka, Kubernetes, Gradle, Keras
Software	Intellij, LaTeX, Git, Docker, Unity, Matlab, Jupyter Notebook

POSITION OF RESPONSIBILITY

Programming Club	May 2019 - July 2019
<i>Deep Dive Into CP19 Mentor</i>	<i>IIT Kanpur</i>

- Mentored a group of 15 students teaching them algorithms that are used in competitive programming

Programming Club	April 2018 - March 2019
<i>Secretary</i>	<i>IIT Kanpur</i>

- Managing various Programming club events and workshops throughout the year

Academic Mentor	April 2018 - March 2019
<i>Intro to Programming</i>	<i>IIT Kanpur</i>

- Guided freshers who face difficulty in Programming by hosting Lectures and Doubt-Clearing Sessions.

INTERESTS

Competitive Programming

- Rated **candidate master** on [codeforces](#) and highest rating of **5 star** on [codechef](#)