SUDHANSHU BANSAL

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EDUCATION

Indian Institute of Technology Kanpur   *July 2017 - Present*
Btech Undergraduate   Overall GPA: 8.0/10
Department of Computer Science Engineering
Netaji Model School   *2017*
12th CBSE   Percentage: 91%
Holy Family Convent School   *2015*
10th ICSE   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   May 2020 - June 2020
Team:Research Role:Backend

· 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   December 2018
Speech to text

· 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   May 2018 - July 2018
Full stack Developer

· 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

COURSE PROJECTS

Designing Java Compiler   January 2020 - March 2020
CS335: Compiler Design

· Create a Lexer and Parser(LLstar) for Java8
· Created AST using antlar

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

PROJECTS

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

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, Computer Organisation
Machine Learning : Intro to ML, Statistical NLP, Linear Algebra and Differential Equations
Computation: Discrete Mathematics, Probability in CS, Logic, Numerical Methods, Theory of Computation, Cryptography, Game Theory

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

POSITION OF RESPONSIBILITY

Programming Club   May 2019 - July 2019
Deep Dive Into CP19 Mentor   *IIT Kanpur*

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

INTERESTS

Competitive Programming

· Rated **candidate master** on codeforces and highest rating of **5 star** on codechef