Mayank Raj

Pre-Final Year | Computer Science & Engineering | IIT Jodhpur
raj.6@iitj.ac.in | +91-9521197358

EDUCATION

IIT JODHPUR
B. Tech. in Computer Science & Engineering
Expected May 2021 | Jodhpur, India
Current CGPA: 9.69 / 10
Department Rank: 1

K.V. NO. 2 AFS, JODHPUR
Board - C.B.S.E. | Class 12
Grad. May 2017 | Jodhpur, India
Percentage XII - 94.8/100

K.V. DALHOUSIE
Board - C.B.S.E. | Class 10
Grad. May 2015 | H.P. , India
CGPA X - 10/10

COURSEWORK

COMPUTER SCIENCE CORE
- Data Structures & Algorithms
- Object Oriented Analysis & Design
- Digital Logic and Design
- Software Engineering
- Computer Architecture and Organisation
- Theory Of Computation
- Algorithm Design and Analysis
- Compiler Design
- Operating System
- Data Communication

MATHEMATICS
- Probability, Statistics & Random Processes
- Financial Engineering
- Ordinary Differential Equations

SKILLS

PROGRAMMING
Proficient:
C++ • Python • Java
Familiar:
Javascript • Solidity

FRAMEWORKS
Django • ReactJS
Apache Solr • Mockito • Spring

UTILITIES
Git • JIRA • Apache Phoenix

LINKS
Github:// **MayankRaj23**
LinkedIn:// **mayankraj23**
Interviewbit:// **Mayank Raj**

WORKING EXPERIENCE

SOFTWARE DEVELOPER (SDE) INTERN | Arcesium Pvt. Ltd.
April 2020 - June 2020 | Fair Usage Of Queues and Event-Driven Incremental Data Processing
- Modified the existing infra used in the firm to employ a fair usage strategy for different types of messages in queues.
- Reduced the waiting time of items in queue by **33%**.
- Changed the current architecture from scheduled tasks to event-driven processing to reduce redundancy from database.
- The implemented strategy saved **1.5GB** database space per month and avoid duplicacy of **11 mn.** records.
- Technologies used: **ActiveMQ, Spring Batch, MyBatis, Mockito, ReactJS**.

PROJECTS

DOMAIN SPECIFIC SEARCH ENGINE | B. tech. project
Jan 2019 - Present | Guide: Dr. Sumit Kalra | Open Sourced at Github
- Developed a domain-specific search engine - **AgroSearch** on Solr, with **1.5M+** pages indexed for searching, on multiple Solr instances.
- Built web crawlers on Python Scrappy and Nutch, to work on concepts of **SEO , Web document Indexing and secure crawling**.
- Technologies used: **Solr, Hadoop, Nutch, Scrapy, Django**.
- Planning to improve the search time **upto 5 times** in the second phase by using Machine learning algorithms for page ranking and automated crawling.

BLOCK-VOTE | Block-chain based voting system
July 2019 – Sep 2019 | Microsoft Code.Fun.Do 2019 Project | Project Link
- **Phase 1**: Provided **remote voting, automatic voter creation and expedite vote counting mechanism.**
- Implemented secure voting and eligibility check of the voter and the candidate.
- Tools used are - **Solidity, React, Azure Blockchain Service**.

AWARDS AND ACHIEVEMENTS
- **Department Rank 1 in Computer Science Department and Batch Rank 1** in UG - 2017 batch with a **GPA of 9.69**.
- Secured a **SGPA score of 10/10 in semester III**
- Among the top 0.2 % percentile of 1.4 million applicants in JEE-Advanced 2017.
- 2nd Inter-IIT Cultural Meet -**Bagged 5th position** in Short-film making Comp.
- 3rd Inter-IIT Cultural Meet - **Bagged 4th position** in Screenplay Writing Comp.

POSITION OF RESPONSIBILITY

STUDENT GUIDE | Counselling Service | July 2018 – May 2019
- Helped 10 freshmen students to make the transition into college life.
- Helped organize orientation program for 240 freshmen students.

VICE-CAPTAIN | Frame X | July 2018 – May 2019
- Organising and conducting the events of the film - making, script writing and representing the institute in Inter IIT and other institute level competitions.

CORE-MEMBER | Office of Student Placement | April 2018 – Present
- Help maintaining cordial relations with affiliated companies.
- Expanding opportunities for students for interns and jobs.