# Anshul Ahuja

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#### **EDUCATION**

#### **IIT JODHPUR**

B.Tech. IN COMPUTER SCIENCE & ENGINEERING

Expected 2021 | Jodhpur, India GPA: 8.67/10 (upto  $5^{th}$  sem)

#### **DPS DWARKA**

CLASS 12 | CBSE 2017 | New Delhi, India Percentage: 95%

#### LINKS

Github://anshulahuja98 LinkedIn://anshul-ahuja Medium://@anshul.ahu Google Scholar

#### **UNDERGRADUATE**

Object Oriented Analysis & Design Data Structures & Algorithms Software Engineering Operating Systems
Algorithm Design and Analysis Quantum Information Computer Networks\*
Database Systems\*
Artificial Intelligence\*
Financial Engineering\*
\* Ongoing Courses

#### SKILLS

#### **PROGRAMMING**

- C/C++
- C# Python Javascript

#### **WEB**

- Django (Python)
- MySQL PostgreSQL
- REST
- HTML/CSS Bootstrap

#### **TECHNOLOGIES**

- Git Linux shell utilities
- Raspberry PI
- Azure(Blob. Cosmos etc)
- Azure Functions
- Docker
- Kubernetes & AKS

#### INITIATIVES

Spearheaded the growth of open-source enthusiasts' student group Devlup Labs at IIT Jodhpur. Conducted and hosted sessions and webinars on various technologies for students. Launched and mentored 10+ projects.

#### **EXPERIENCE**

#### MICROSOFT | SOFTWARE ENGINEER INTERN

May - July 2020 | Azure Backup

- Developed an E2E mechanism for taking App Consistent backups of workload associated CSI PersistentVolumes and cross cluster restore in Kubernetes(AKS).
- Made contributions to the Azure Disk CSI driver.

#### MICROSOFT | SOFTWARE ENGINEER INTERN

May - July 2019 | MSIDC Hyderabad | Azure Backup

- Developed complete Backup and Restore solutions for PaaS (Azure hosted) Open-source databases(PostgreSQL, MariaDB)
- Experimentation using **Azure functions (serverless)** as hosting environment.

#### FREELANCING | UPWORK

• Custom work on Kubernetes Dashboard for client on Upwork

#### OPEN SOURCE CONTRIBUTOR | GITHUB ☑

- Contributed to various open-source repos, merged PRs Github
- Contributions to kubernetes/dashboard ☑

#### **PROJECTS**

#### BTECH PROJECT (\*ONGOING) | FEDERATED LEARNING EDGE-IOT INFRA

Mentor: Dr Suman Kundu

• Developing a distributed machine learning framework (federated learning) based on tensorflow federated to facilitate Edge enabled low power devices.

## BTECH PROJECT | DISTRIBUTED SYSTEMS | OPEN SOURCE CONTRIBUTION Python Library PyPI | Published IEEE | Mentor: Dr Subhajit Sidhanta

- Poster Title: 'Edge Applications: Just Right Consistency' presented in (SRDS)
   39th IEEE International Symposium on Reliable Distributed Systems(Core-A)
   2019 at Lyon, France. Published on IEEE
- Developed an **open-source python library** for supporting **Conflict-free Replicated Datatypes(CRDTs)** hosted on Python's package manager (PyPI).
- Contributed to open-source efforts of AntidoteDB by creating kubernetes based deployment for it. K8s deployment forked by Antidote

### SPC PORTAL | MVC BASED PORTAL FOR STUDENT PLACEMENT CELL

Deployed at spc.iitj.ac.in 🗗 | Open-Sourced Github 🖸

• Developed portal in **Django (Python)** to automate and streamline end to end placement procedure for **900+** students and recruiters in 2018-20.

#### **DISASTER CHAIN | IOT | MICROSOFT AXLE 2019**

Demo Video Youtube <a>C</a> | Open Sourced Github <a>C</a> | News Article TOI <a>C</a>

- A distributed IoT solution built using Raspberry Pi & Node MCUs for disaster detection & early warning systems for cloud offloading of disaster management.
- Trained a model using **Azure Custom Vision service** exported to Android app to predict skin diseases from pictures offline.

#### FINANCIAL ENGINEERING GITHUB [ GITHUB [

- Experimented with various market technical indicators whilst developing a new indicator backtested on market data.
- Portfolio optimization of tech stocks listed on NASDAQ.

#### **ACHIEVEMENTS**

- 2019 Runner up, Microsoft Code.Fun.Do++ at IIT Jodhpur
- 2019 2<sup>nd</sup> Runner up, Microsoft AXLE (Code.Fun.Do++ National) out of 21 teams
  Prize money 1 Lakh INR and 5000 USD Azure Grant under AI for good initiative
- 2018 Winner, Microsoft Code.Fun.Do++ at IIT Jodhpur
- 2018 National finalists in Microsoft Imagine Cup, India
- 2018  $2^{nd}$  Runner up (OnCampus Round) Microsoft code.fun.do OnCampus hackathon
- 2018 Finalist (Online) top 3 teams out of 53 teams, Microsoft Code.Fun.Do
- 2016 KVPY Scholar Kishore Vaigyanik Protsahan Yojana (KVPY) SX Scholar

#### HOBBIES

- SpeedCubing Enthusiast
- Tech Blogger Medium: @anshul.ahu
- Swimming

#### POSITIONS OF RESPONSIBILITY

- STUDENT PLACEMENT CELL | WEB DEVELOPMENT HEAD
- QUIZ CLUB | CAPTAIN
- IGNUS INTER COLLEGE FEST | WEB DEVELOPMENT HEAD

#### **EXTRACURRICULAR**

- Participated in inter IIT-IIM Quiz Nihilanth'18 at IIM Ahmadabad
- Participated in Inter IIT Cultural Meet '19 at IIT Roorkee and '20 at IIT Bombay
- Conducted various sessions/talks for freshmen & sophomores at IITJ on version control, automation, IoT etc.