# ANIRUDH NANDURI

#### **EDUCATION**

### Indian Institute of Technology, Kanpur

M.Tech. in Computer Science & Engineering - 9.0 GPA

Aug 2021-June 2023

Courses: • Data Structures and Algorithms • Database Management Systems • Operating Systems • Introduction to Machine Learning • Information Retrieval

### National Institute of Technology, Warangal

B.Tech. in Computer Science & Engineering - 8.34 GPA

Aug 2016 - May 2020

# WORK EXPERIENCE

#### Salesforce

Associate Member of Technical Staff

June 2020-July 2021

- · Worked on developing static container scanning microservice application using Spring Boot and AWS. Detected static security vulnerabilities in software artifacts using open source tools.
- Developed scheduling and reporting features running on a Kubernetes cluster.
- Added unit tests and participated team-level bi-weekly deployment and patching activities.

#### **VISA**

Software Engineer Intern

May 2019-July 2019

- Developed an application to validate serversafter patching. Provided a user interface to configure the validation using http, ssh and shell commands.
- Integrated the application with the internal tools of VISA.

#### **PROJECTS**

# Representation Learning using Single cell Multiomics datasets

(May'22 - Present)

- Implemented Disentangled Multimodal VAE (DMVAE) and Total Variational Inference framework (TotalVI) to generate private latent representation of genes and protein on CITE seq dataset.
- Benchmarked the model and obtained 16% performance improvement on ARI metric of cell-type clustering compared to SOTA models.

## Simple File System, Self Project

(June'22 - July'22)

- Developed a simple UNIX-like file system in user space which supports file management and directory management (create, delete, copy data).
- Provided a command line interface to enter commands and manage the file system.

## **Document Retrieval Engine of English Corpora**

(Feb'22 - March'22)

- Implemented SimpleBoolean, TF-IDF and BM25 based information retrieval system in python
- Retrieved top 20 relevant documents to a query from 8634 document corpus using the IR systems.
- Evaluated the IR systems on random queries and calculated the Mean Average Precision(MAP) metric.

#### **SKILLS**

- Programming Languages: C C++ JAVA Python SQL
- Libraries/Tools: Git Pandas Numpy Pytorch-Lightning Scanpy Docker Linux Machine Learning
- Cloud Platforms: Amazon Web Services (AWS)
- · Databases: MySQL

### **ACHIEVEMENTS**

- Secured All India Rank 164 in GATE CS 2021, about 1.1 lakh candidates appeared for the examination
- Secured All India Rank 1413 in JEE Mains 2016, about 12 lakh candidates appeared for the examination
- Selected for Amazon ML summer school 2022