

## SKILLS

**Programming Languages:** C++, Java, Python, SQL, HTML, CSS, JavaScript  
**Technical Tools:** Git, GitHub, UNIX, Linux Command-Line, Node.js  
**Databases:** OracleDB, MySQL, MongoDB, Pandas Python  
**Relevant Coursework:** Algorithms, Data Structures, Database Management, Computer Networks, Machine Learning

## EDUCATION

**Master of Science, Computer Science,** University of Florida, GPA: 3.83/4.00 Jan 2021 — May 2022  
**Senior Certification Programme, Computer Science,** University of Florida, GPA: 3.58/4.00 Jan 2020 — May 2020  
**Bachelor of Technology, Computer Science and Engineering,** Amity University August 2016 — May 2020

## WORK EXPERIENCE

**Software Developer Intern** May 2019 — July 2019  
ENAAAR Financial Corp Delhi, India

- Worked on technologies like SQL to build relevant queries and used Python data libraries to pre-process and clean data tables.
- Used Python libraries like Matplotlib and Seaborn to create charts and plots to better understand data and correlation between columns.
- Built a Python script that takes raw-data as input and outputs a clean, ready to use CSV data frame that saved time for the employees.

## PROJECTS

**Bitcoin Miner** Aug 2021 — Oct 2021

- A bitcoin mining software that generates random string such that there are 'N' number of leading zeroes on SHA-256 value of that string, where 'N' is user specified. To make sure that each bitcoin is unique, the string will have user's unique username as prefix.
- Based on AKKA library in F#, the program connects with other machines and makes them a "worker" to mine bitcoins faster.

**P2P File Sharing** Jan 2021 — April 2021

- A terminal based remote Peer-to-Peer file sharing program based on BitTorrent protocols.
- Features implemented are peer-tracking, handshake, choke/unchoke, chunking and merging file pieces and logging all events.

**Netflix Data Analysis Using Graph Simulation** Jan 2021 — April 2021

- Analyzed Netflix data consisting over 100 million movie ratings by simulation graphs built on various adjacency criteria like making an edge between two customer nodes if they rated a same movie 5 stars.
- Suggested movies for customers by finding out highest rated movies by other customers having closest distances in the graph.

**HashTag Counter** Jan 2020 — April 2020

- A project to find out the 'N' number of most popular hashtags appeared on social media websites such as Twitter and Facebook. Created by implementing a max Fibonacci Heap in Java.

## PUBLICATIONS

**Pneumonia Identification in Chest X-Ray Images using EMD** Jan 2020  
Springer [\[Link\]](#)

- Pneumonia is a common lung infection where an individual's alveoli fills up with fluid which forms cloudy like structures. EMD, also known as Earth Mover's Distance is the distance of two probability distributions over some region D. We pre-processed the images, re-scaled, rotated and normalized the intensity such that we have a set of uniform size/shape of lungs X-Rays and then we calculated EMD on them and images which had a certain threshold were predicted as infected with an accuracy of 84%.

**Video Analytics Based Identification and Tracking in Smart Spaces** April 2020  
IEEE Xplore [\[Link\]](#)

- This paper describes and reviews various algorithms and methods for the applications of the video content analysis. Discussed are tracking, analysis of the movement and behaviors of objects and humans, face recognition, license plate recognition, tracking a moving object, searching for an object, identifying the geographic location of something, detecting suspicious activities etc.

## ACCOMPLISHMENTS AND EXTRA-CURRICULAR

**Deep Learning Specialization,** Did 5 courses on Deep Learning on coursera as a specialization. Learnt about CNN, RNN, strategies like dropout, BatchNorm etc. Jan 2019

**The Joy of Computing using Python,** Got Gold certification by securing 90% in Python MOOC from IIT Ropar. Dec 2018

**United Nations RIO+24 IDRC 2019 Certification,** Successfully completed the exam. April 2019