#### NANDINI AGRAWAL

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#### **EDUCATION**

Subjects / Electives

**Technical Proficiency** 

B.Sc in Computer Science	Ashoka University		2020	3.81/4 CGPA
CLASS XII	Mayo College Girls' School	ISC	2017	95 %
CLASS X	Mayo College Girls' School	ISCE	2015	94 %

Advanced Machine Learning, Federated Learning, Computer Networks, Computer Organisation and Systems, Algorithms

Design and Analysis, Programming language design and Implementation, Operating Systems, Managing Values of a Venture,

Advance Programming, Probability and Statistics, Introduction to Programming, Discrete Mathematics, Introduction to

Machine Learning, Linear Algebra, Blockchain and Cryptocurrencies, Computer Security and Privacy

AWS, Dart, Tensorflow, Premiere Pro, Github, Hyperledger Fabric, Flutter, PyTorch, Selenium, Node.js, Microsoft

Office, Socket Programming, C Programming, JavaScript, REST, Unity3D, Blockchain Development, Keras, Python

#### INTERNSHIPS EXPERIENCE

#### ASHOKA UNIVERSITY | Research and Software Development Intern

Jun 2020 - Aug 2020

I created Covidbloc, a system involving an android mobile application and a web portal that uses blockchain powered contact tracing to prevent the spread of COVID-19. It is an improvement to the existing contact tracing schemes as we now use store the data on a blockchain database in a more secure, transparent and immutable way without revealing the identity of its users. My team has submitted an implementation paper at SPACE 2020 conference.

#### KINGS COLLEGE LONDON | Research Intern for the DeCovIndia Project

May 2020 - Aug 2020

I worked on scrapping and analysing different data sources and policies announced by the Indian government to tackle COVID-19

#### KOC UNIVERSITY | Research Intern working on Selfish Mining Attacks in Blockchain

Jul 2020 - Present

I worked on simulating BlockSim (a blockchain simulator) over the network and writing selfish mining attacks and other algorithms on this simulation.

METLIFE | Data Analyst Jun 2019 - Jul 2019

I worked on regression models like simple and multi variable linear regressions to develop a sales forecast model.

#### **PROJECTS**

#### Conversational Chatbot - Machine Learning

Mar 2020 - May 2020

The project dealt with building a conversational chatbot using a seq2seq model with attention. The github repository can be found here: https://github.com/agrawalnandini/Chatbot

Hyperfunds - Blockchain Mar 2020 - May 2020

A simple distributed Hyperledger application that can help faculty at Ashoka University reliably spend their research funds with approval from the right administrators. The github repository can be found here: <a href="https://github.com/agrawalnandini/hyperfunds">https://github.com/agrawalnandini/hyperfunds</a>

#### Colouring B&W Images to Coloured Images - Machine Learning

Oct 2019 - Dec 2019

The project dealt with converting black and white images to coloured images using convolutional neural network and other deep learning models in Python. The GitHub repository can be foundhere: https://github.com/agrawalnandini/Coloring\_Black\_and\_White\_CNN

#### Library Management System - Web Based application

Nov 2018 - Dec 2018

The Library Management System is an online portal to issue books from a library. This project's aim was to adopt a fully functioning independent software to manage a library and automate processes wherever possible. This project was done using Java, Javascript, HTML, CSS and MySQL. The github repository can be found here: https://github.com/CS207-AP/Library-Management-system

#### AWARDS AND ACCOMPLISHMENTS

#### Silver Medal for Academic Achievement in Computer Science | Ashoka University

2020

I was awarded the Silver Medal for Academic Achievement in Computer Science for securing the second highest GPA in my batch.

## Magna Cum Laude Honors | Ashoka University

2020

I was awarded the Magna Cum Laude Honors for securing a GPA of 3.82 in my undergraduate years at Ashoka University.

### Deans List | Ashoka University

2019

I have been on the deans list for 5 semesters in my three years of college for excellence in academics.

#### Winner of Triquetra Squash Championship (Women Individuals) $\mid$ IIITD and DTU

2019

# Secured the first position in an Inter-College Sports Fest in Women's Squash School Colours for Excellence in Squash and Computer Science | Mayo College Girls School

2017

School colours is the highest form of appraisal given to a student for excellence in a particular field. I received the school colours for squash and computer science.

#### POSITIONS HELD

### Teaching Assistant | Ashoka University

Aug 2019 - Present

As a teaching assistant for Computer Organisations and Systems, Introduction to Computer Programming and now Computer Networks my role would be to help students learn in and outside the class. Create Assignments and Quizzes and grade them. Provide solutions for the assignments and quizzes. Be a point of contact between professor and students and resolve any issues and report about students performance.

#### Squash Captain and Computer President in School | Mayo College Girls' School

Mar 2016 - Mar 2017

I was the captain of the squash school team having represented myself at national level competitions. I also was the head of the CS department.