United States (413)275-3973

# **SNEHAL THAKUR**

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## **EDUCATION**

**University of Massachusetts Amherst**Masters in Computer Science

Fall 2021 - 2023

**Veermata Jijabai Technological Institute**B. Tech in Electronics and Telecommunication

July 2015- May 2019

#### **EXPERIENCE**

#### Amazon Web Services(AWS), USA

## **Software Development intern**

Jun 2022 - Present

- Developing a robust mechanism for routing customer configurations for AWS's Trusted Advisor service.
- Secured global database, preserved data contract & generalized data to use other AWS resources which is convenient through integrated architecture.
- AWS resources used: DynamoDB, Lambda, CloudWatch, API Gateway, CloudFormation, S3, IAM and Route53

#### University of Massachusetts Amherst, USA Software Developer student assistant

Nov 2021 - Feb 2022

- Developed a frontend and backend application for School of Public Health and Health Sciences using HTML, CSS, SQL, Javascript.
- Application will be helpful in health related research in the domain of HIV transmission risk determinants.

#### Schneider Electric, India

#### Deputy Manager - R&D

Jul 2019 - Aug 2021

- Collaborated on a remote monitoring system used for analyzing the performance and the working of connected devices such as Industrial drives, Agri modules, Solar drives, Switchgears, etc.
- Connected all the Modbus devices to the cloud through the platform which lead to significant growth and revenue for the company.
- Provided valuable data into the hands of the users using analytics in order to make quick decisions remotely.
- Assisted production support team & resolved software issues efficiently of other switchgear products(Cline, Bluetooth-based ACB).

## Centre of Excellence, VJTI, India

#### **Research Assistant**

Nov 2017 - Jun 2019

- Prepared a test-bed for cyber-physical critical infrastructure for different industrial use-cases using machine learning & Blockchain.
- Created smart systems to perform & mitigate different attack vectors by taking preventive measures using feedback mechanism.

## Bhabha Atomic Research Centre (B.A.R.C)

#### Summer Intern

May 2018 - July 2018

• Developed a graphic driver for LCD/TFT controller on micro-controller platform using image processing & algorithm optimization.

## **PROJECTS**

#### **Product Review Sentiment Analysis**

2021

- Analyzed Amazon.com Reviews and Ratings using text preprocessing techniques like Bag of words, TFIDF, Tokenizer from Keras .
- Applied Deep Learning models like BERT, LSTM, CNN and compared their performances by tuning the hyperparameters.

## Big Data Analytics using MapReduce for Movie Recommender System

2021

• Implemented MapReduce library in JAVA with fault tolerant capabilities which would be used for analyzing Movies dataset efficiently.

## Bloom - Fitness Manager Web Application using Node.js, MongoDB, JavaScript

2021

- Developed a platform for tracking physical fitness using GoogleFit API & mental fitness by adding a lifestyle tracker and healthbot.
- Incorporated a healthy recipe guide & Retrospective Tracker for assisting users to adopt better daily habits using Spoonacular API.

## Anomaly Detection and blockchain based Monitoring System for Enforcing Wastewater Reuse

2019

- Created a wastewater recycle control system for its efficient management & coordination among industries & the government.
- Implemented a tamper-proof record of IoT meter readings using Blockchain and Machine Learning techniques.

## **SKILLS**

Programming

Python, Java, C

Machine Learning

Pytorch, Keras, SKLearn, NLTK, Numpy, Pandas, Matplotlib, Apache Spark

Web and Blockchain HTML,CSS,Bootstrap,Javascript,PHP,Nodejs,MySQL,SQLite,Oracle,Mongodb,Solidity,Ethereum,Hyperledger

#### RESEARCH

1.Blockchain and Anomaly Detection based Monitoring System for Enforcing Wastewater Reuse.

IEEE 2019, India

2.Blockchain based Distributed Consensus for Byzantine Fault Tolerance in PMU Network.

IEEE 2019, India

## **AWARDS & EXTRA-CURRICULAR**

2018-19 WRC Blockchain Hackathon (Winner); Global Water Hackathon (1st Runner-up); Siemens Hackathon (1st Runner-up)

2016-19 Volunteer at Teach for India (NGO) & Teacher at Prarambh Shiksha (NGO)

**2016-18 Event Head:** Pratigya, Technovanza(Marketing & Sponsorship)