ADITYA AGARWAL

Website: adityaagarwal.tech

OBJECTIVE Applying for the position of Software Developer. Skilled at Python, Java and SQL.

EDUCATION

B. Tech in Computer Science and Engineering

Alliance University CGPA- (2.5*/4.00) Jul 2021*
12th Grade, Milton Public School, Agra 61.8% May 2017
10th Grade, Delhi Public School, Agra 74.1% May 2015

RESEARCH INTERESTS: Recommender Systems, Natural Language Processing, Computer Vision **COURSEWORK TAKEN:** Scripting Languages, Data Mining and Data Warehousing, Database Management, Data Structures and Algorithms, Engineering Mathematics, Big Data Analysis

INTERNSHIP

Backend Intern, Quichub Innovations LLP, Bangalore

Sep 2020 - Nov 2020

QchiHub is a technology company offering consumer health solutions.

- MyresQR is an emergency response platform that can be used if a certain individual meets with an accident.
- Programmed an SOS button for the user which will send alerts to all the user's emergency contacts.
- Implemented IVR call flows using Exotel API for automated calling and text messaging to automatically connect the victim or the respondent to the emergency contact.
- Built services using Python in Django Web Framework.

Research Intern, National Institute of Technology, Rourkela

Jun 2019- Jul 2019

NIT Rourkela the university of national importance for technical education in the country.

- Learnt and worked upon the recommendation algorithms for collaborative filtering over Netflix Movie Database.
- Implemented Collaborative filtering algorithm on movie dataset for learning and prediction for user recommendation.
- The project is conducted as a research experience and Python was the language of choice.

UNDERGRADUATE PROJECT

Fantastic Computing Machine

Dec 2020 - Present

- Developing a SaaS Platform to deploy Machine Learning Pre-Trained Models and to provide a sharable link for other users to interact with the model.
- Enabled version control for the users to manage and maintain the previous models; Deployed on AWS ECS using Docker Image.
- Implemented user and project details storage through MySQL and Neo4j using Python as the choice of programming language.

COURSE PROIECTS

Human and Horses Binary Classifier

Jul 2020

- Created an image classifier using 3-layer Deep CNN, along with 3 pairs of Convolution and Pooling layer which can classify whether a given image is a horse or a human.
- Achieved 98% accuracy on the training set and 88% on the validation set.

Fashion Object Classifier: MNIST Data

Jul 2020

- Created an image Classifier using 2-layer Deep CNN which can classify a set of images into 10 different fashion items (such as shirt, trousers, boots etc.)
- Achieved 94% accuracy on the classification of the given unknown dataset.

Linear Regression Analysis on Diabetes Dataset

Apr 2020

- Obtained ten baseline variables such as age, sex, body mass index, etc. for 442 diabetes patients to do a quantitative measure of progression of diabetes one year after baseline.
- Trained and predicted the presence of diabetes via a linear regression model.
- Successfully predicted the disease progression, one year after baseline.

Sentiment Analysis using Scikit-Learn

Apr 2020

• Used a simple logistic regression estimator from scikit-learn for sentiment analysis of IMDB Movie Reviews and document classification.

- Classified a Movie review as a positive or a negative, using Bayes Theorem and Laplacian Smoothing.
- The Trained model efficiently classifies the phrase as a positive or negative sentiment.

Movie Recommender Mar 2020

- Created a movie recommender using Tableau train Movie-Lens Dataset for user-item recommendation.
- Enabled recommender classification of the movies based on genre and year and suggest the movies to the user.

Assistant Bot April 2019

- Created a CLI based Assistant bot using Python which can be used for weather, crack jokes, list-out fun facts.
- Enabled partial control of windows computer by modifying and running DOS batch files.

Google Assistant Action: Flash Card-Based Quiz

Apr 2019

- Created a card-based guiz to test user's knowledge in the field of Space Science using Actions on Google.
- Activated action on Google Assistant under the name "Space in a Nutshell".

Light Following Solar Panel Assist

Nov 2018- Dec 2018

- Designed and demonstrated a system to position the solar panel in direct proximity to the sun for increasing their efficiency.
- Created a miniature assist using LDR's.

PUBLICATIONS AND PRESENTATIONS

- Presented a paper and contributed a book chapter entitled "Text Mining Approach Based on TF-IDF and SVM for Text Classification" for the book Latest Innovation for Future Education (LIFE-2021) published by ESN Publications- Jan 2021.
- Presented a descriptive analysis on the Topic "Lung Cancer Detection using Machine Learning" at Present Around the World (PATW) competition hosted by The IET, at Local Level (Karnataka Level)- Feb 2020
- Presented the project," Light Following Solar Panel Assist " at interdisciplinary Techno Fair 2018 and secured the 2nd position among 45 participants for Presenting an Innovative Idea- **Dec 2018**

CERTIFICATIONS

- Introduction to TensorFlow for AI, ML, and Deep Learning- Coursera: deeplearning.ai, Jun 2020
- Structuring Machine Learning Projects- Coursera: deeplearning.ai, May 2020
- Python Data Structures- Coursera: deeplearning.ai, May 2020
- Neural Networks and Deep Learning- Coursera: deeplearning.ai, Apr 2020
- Machine Learning for All- Coursera: University of London, Apr 2020
- Software-Defined Storage Concepts, VMWare, Jan 2020

TECHNICAL SKILLS

Operating Systems: Windows, Ubuntu (GUI and CLI), macOS

Languages: C++, Python, Java

Database and Client/Server Technologies: MySQL, MS Access, SQLite, Amazon RDS, Neo4j

Software Tools: VS Code, Git, NetBeans, Atom, Anaconda, Eclipse, Colab, Tableau

Web Applications: HTML5, JavaScript

Others: TensorFlow, NLP, Regression Analysis, Convolutions, AWS, Docker

AWARDS AND EXTRA-CURRICULAR ACTIVITIES

- Attended the Workshop APIs for Beginners organised by IEEE Computer's Society, Bangalore, Jan 2021
- Attended the Workshop Fundamentals of Image Processing using Python organised by CVM University, Gujarat, May
 2020
- IEEE Student Member, Aug 2019 Jan 2020.
- Participated and Secured the First position in the "High Endurance, Glider Making" and "Hit the Target, Hydro Rocketry" competition in Astro Space Camp organized by SSERD- Nov 2017.

LANGUAGES: English, Hindi (Read/Write/Speak)