GitHub ◆ Google Scholar ◆ LinkedIn ◆ Homepage
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Anurag Tripathi

Recent graduate with over one year of experience in IT Risk Management and Artificial Intelligence. Proficient with Python and its web frameworks as well as Machine Learning and Deep Learning.

EXPERIENCE

Com Olho, Gurgaon — *Product Manager*

Feb 2022 - Oct 2022

- Developed web application back-end components while communicating with clients to identify their needs/goals and work on meeting them.
- Worked on the improvement of data protection and security, increasing security rate while creating new user information solutions.
- Obtained adequate experience in reviewing Python code for running the troubleshooting test cases and bug issues.
- Experience developing under Linux.
- Basic understanding of front-end technologies, such as HTML, and CSS, and good UI development experience.
- Database knowledge and python interaction with databases.
- Experienced with selenium web-based automation tools.

Ennoventure Technologies Pvt. Ltd., Bangalore — *Software Engineer*

Aug 2021 - Feb 2022

- Experienced with flask framework.
- Responsible for creating and testing APIs and deploying in Azure cloud and utilizing Postman to make API requests.
- Used SQL Server 2016 for storing the data and also working with the databases which are hosted and created on Azure.
- Collaborated with teammates and updated application versions using Git.
- Responsible for training machine learning models on the company's patented product for identification when scanned from the mobile app.

Com Olho, Gurgaon — *Research Intern*

Feb 2021 - June 2021

(Certificate)

- Use of high-speed computer vision to study the effect of vehicular frequency over time on pollution.

INTEREST

- Writing Blogs (link)
- Reading Books
- Playing Table Tennis
- Playing Basketball

SKILLS

- **Languages**– Python, C++, HTML
- Machine Learning
- Deep Learning
- **Frameworks**–Django, Flask
- SQL
- **OS**– Linux, Windows
- **Platforms**– Git, Amazon Web Services.

CERTIFICATIONS

Machine Learning – Stanford University (Certificate)

Machine Learning with python – IBM (Certificate)

Getting Started with AWS Machine Learning – (Certificate)

Databases and SQL for Data Science with Python – IBM (Certificate)

Programming for Everybody (Getting Started with Python) – Michigan University (Certificate)

- Implemented vehicle detection at NH-8 (near Cybercity, Gurgaon) using the OpenCV model.
- Model was running for 1 month to get the trend of frequency and density of vehicles observed with respect to the real-time air quality index.
- Study revealed that 75% of city pollution is contributed by vehicular density. (Source Code)

ClearExam, New Delhi — *Software Developer*

Dec 2020 - Feb 2021

(Certificate), (LOR)

- Developing applications (coding, programming)
- Debugging and testing code.
- Documenting and testing new software applications.
- Researching, investigating, and fixing a wide range of technical issues.

EDUCATION

Amity University, Noida — *B.Tech. (ECE)* —*2017 - 2021*

- Department: Electronics and Communication Engineering
- Thesis: Classification of cervical cancer using ML and DL (link)
- Advisor: Anupama Bhan
- GPA: 7.84/10

PUBLICATIONS

Classification of Cervical Cancer using Machine Learning

— *This paper presents an ML classification method applied to the Herlev pap-smear image dataset, using SVMs. For the segmentation phase, active contour models that are driven using Gaussian Fitting Energy were utilized. These segmented images were compared with the manually annotated images that were provided by professional cytologists. The dice index was the parameter used in the comparison, which reported a match of 92%. With polynomial SVMs highest classification accuracy was 95%.*
(Certificate),(IEEE Paper)

Classification of Cervical cancer using Deep Learning

— *Classification of cervical cancer on SIPAKMED Dataset on different deep learning models was done. This paper presents deep-learning classification methods applied to the SIPAKMED pap-smear image dataset to establish a reference point for the assessment of forthcoming classification techniques. The highest classification accuracy of 94.89% was obtained with ResNet-152 architecture.* (IEEE Paper)

Automatic Diabetes and Liver Disease Diagnosis and Prediction Through SVM and KNN Algorithms

— *The goal of this research is to select a robust machine learning algorithm that can equally be applicable to diabetes prediction as well as liver disease prediction. This study analyzes two machine learning approaches, support vector machine (SVM) and K-nearest neighbors (KNN) algorithms over two different datasets, diabetes and liver diseases datasets. It was observed that a tuned radial SVM method performed with the highest accuracy in the detection of diabetes and liver disease detection with an accuracy of 0.989 for diabetes detection and 0.910 for liver disease detection.* (Springer Paper)

PROJECTS

Implementation of Machine Learning using Python for Classification of Human Limb Movement using UWB antenna

— *The work explores the practicality of using antennas for limb movement identification with no dedicated sensors. The fabricated antennas were placed on each foot of the considered subject (human) while they demonstrated sixteen different limb movements. The dataset for every movement has been recorded using a Vector Network Analyzer. Measurement outcomes reveal that the received power of on-body antennas for both foot movements shows unique channel functionalities. These power measurements may be used to identify the change in the limb movement, further from the recorded power measurements, derived link quality metrics and antenna scattering parameters have been computed for each movement and a dataset has been created. Classification of human limb movements based on the data set created was implemented using k-NN with a classification accuracy of 98.8% using normal splitting while 92.4% using 5-fold cross-validation and AdaBoost classifier with the accuracy of 85.27% while with 10-fold cross-validation, accuracy is 85.98%.*

Face-X

— *Recognition of faces by different algorithms and frameworks. Despite a variety of open-source face recognition frameworks available, there was no ready-made solution to implement. In this project, all kinds of algorithms are implemented and even with various operations that can be implemented in a frontal face. The available algorithms processed only high-resolution static shots and performed sufficiently well.* (Source Code)

Face mask detection using YOLO Algorithm

— *Detection of face mask using the YOLO Algorithm.* (Source Code)

To display deep learning model on Pima Indians onset of diabetes binary classification problem

— *Classified human limb movement using machine learning with python by fabricating on body ultra-wideband antennas which were used on the human limb to record readings for limb movements.* (Report)

Developing A CNN for MNIST handwritten digit classification

— *Classified handwritten image digit into one of 10 classes representing integer values from 0 to 9 using deep learning convolutional neural networks that achieve a classification accuracy of above 99%, with an error rate between 0.4 %and 0.2% on the holdout test dataset.* (Report), (PPT)

NGO-Volunteered for **Jax foundation** and worked on the topic of Cancer Awareness.

Taught unprivileged kids every weekend and introduced them to computers and the internet world
(Case Study),(Certificate)

NGO-Volunteered for **Lakshy Foundation** for **6 months** and worked in healthcare and assisted the fundraising team with writing grant proposals.

Unpacking and distributing food aids.

Helped to develop an online platform for stray animal adoption. (Certificate)

LANGUAGES

English, French, Hindi