# **Anant Ranjan**

anantranjan07@gmail.com | 9123790695 | Bangalore, India | linkedin.com/in/anant-ranjan-75b5a51a7/ | github.com/anant123-ai

#### **SUMMARY**

- Business-minded data scientist with a demonstrated ability to deliver valuable insights via data analytics and advanced data-driven methods. Relied on as a key advisor in driving global growth; gains in customer loyalty; and record-setting profit improvements.
- 1.5 years of experience in Data Science, Machine Learning and model deployment.
- Experience in building APIs using flask and Streamlit for the Machine Learning models

#### **EXPERIENCE**

#### Data Scientist Intern, Hindustan Times Media Labs.

Aug 2020 - Present

- Worked on building content based recommendation system and end to end pipeline, deployed the code for production for OTT Play app.
- Image Quality Assessment by flagging blurred images, watermark/text detection using OCR, dimension and image super resolution using Enhanced Deep Residual Networks for Slurrp app.
- Performed data collection for various products by building dynamic crawlers/scrapers on various kinds of sitemaps/RSS/html.
- Data preprocessing of extracted raw data using various NLP techniques and data migration in production DB for Slurrp app.
- Worked on building nutrition calculator, nutrition correction API using Flask for Slurrp app.
- Built News crawler pipeline, Implemented stock news categorization and synonyms search engine using Elastic Search for one of the products.
- Participated in some other projects and performed various tasks like text summarization model using NLP techniques, Sentimental Analysis, Ad Intelligence.

## Machine Learning Engineer Intern, Atomgear.tech.

Feb 2020 - Jul 2020

- Human body segmentation (pretrained model to SegNet) to classify human body and background.
- Background subtraction to isolate useful information in an image using various ML techniques.
- Research on SMPL, Star, Expose models and implementing those models in our dataset to get best model.

## Machine Learning Engineer Intern, Applied Ai Course

Jul 2019 - Jan 2020

- Experience in developing Machine Learning/Deep Learning models and creating API using Flask.
- Developed skills in Machine Learning and Deep Learning in various aspect such as Classification, Regression, and Clustering and implemented various projects in these fields as well.

#### **PROJECTS**

# Automated Application Screening on donorschoose.org dataset Link [https://tinyurl.com/ye6f5ww7]

- Donors choose is a US based non-profitable organization that allows individual to donate directly to the public school classroom project. This Dataset contains teacher project application including project attribute, School attribute, application essay based on which our objective is to predict a project proposal whether it will be approved or not with testing AUC of .91
- Text Preprocessing [BOW, TF-IDF, W2V], GBDT, Naive Bayes, Decision Tree, Word Embedding, LSTM

#### Tomato Plant Diseases Classification Link[https://tinyurl.com/zuxjxueu]

- Built a CNN based image classification model to classify tomato leaf disease by transfer learning VGG16 and Inception v3 with Adam optimizer with validation accuracy of 92%.
- Created a web app using flask for deployment of the model.

## Review Classification on Amazon Fine Food Review Dataset Link [https://tinyurl.com/3ecj6amj]

- This dataset consists of reviews of fine foods from amazon Reviews which include product and user information, ratings, and a plain text review. Our objective is to predict whether a review is positive or negative.
- Built a model using SGD classifier and Transfer Learning with BERT Baseline Model, with accuracy of 96% and created a flask web app for deployment of the model.

## Document Classification Link [https://tinyurl.com/2dfa5b2x]

• Convolutional Architecture applied on Text Data to classify from Multiple Types of Email Documents

## Medical Report Generation Using Deep Learning Link [https://tinyurl.com/3kabd6t3]

• Medical reports generation by observing X-rays automatically by attention mechanism with Bidirectional GRU , Image feature extraction using ChexNet.

## **Spoken Digit Recognition**

- In this project we have done a Spoken Digit Recognition with Input as speech signal and output as digit number.
- Converting row to spectrogram and creating the augmented data with the help of Librosa library and trained the LSTM network. Link[https://tinyurl.com/acmzdbzf]

#### Please review my GitHub link

For other implementation. Link[<a href="https://github.com/anant123-ai?tab=repositories">https://github.com/anant123-ai?tab=repositories</a>]

#### **EDUCATION**

**Bachelor of Technology**, Electronics And Communication Engineering Netaji Subhash Engineering College, Kolkata

Jul 2015 - Jul 2019 GPA: 7.46

## **SKILLS**

**Machine Learning**: Logistic Regression , SVM Kernel , XGBOOST / LightGBM , Random Forest , Naive Bayes , Decision Trees , NLP , Clustering , Scikit Learn , Ensemble Modelling , Dimensionality Reduction : PCA , t-SNE , Matrix Factorization

 $\label{eq:condition} \textbf{Deep Learning} : \ Deep \ Neural \ Network \ , \ BackPropogation \ , \ CNN \ , \ RNN \ , \ NLP \ - \ Transformers \ \& \ BERT \ , \ Encoder-Decoder \ Model \ , \ Attention \ , \ LSTM \ , \ Sequence \ Modelling \ , \ Image \ Segmentation \ Models \ : \ UNET$ 

Big Data: Basics of Hadoop, MapReduce, PySpark, MLlib, MySQL, DataBricks, MongoDB

**NLP**: Tokenization, W2V, Embedding, Padding, Part-of Speech Tagging, Sentiment, Analysis, Transformers-BERT, BOW, TFIDF, Regex

**Programming**: Python, Basics of C & Java, Tensorflow and Keras

Deployment: Using EC2 Instance on AWS, Heroku

Web Scraping: Beautiful Soup, Selenium

## **CERTIFICATIONS**

- Applied AI Course
- Value Addition Training on programming, IEEE