Tanay Kulkarni

tanaykulkarni06@gmail.com | tanaykulkarni.github.io | linkedin.com/in/tanaykulkarni06 | +1 (812)-369-0671 | Bloomington, IN

EDUCATION:

Indiana University, Bloomington, IN	Dec-2022
Master of Science in Data Science	3.67 GPA
University of Mumbai, Mumbai, India	Jun-2020
Bachelor of Engineering in Information Technology	3.7 GPA

TECHNICAL SKILLS:

Programming languages/Web Technologies: Python, R, SQL, HTML, CSS, JavaScript, Bootstrap Big Data/ Machine Learning/ libraries: PySpark, FastAPI, MongoDB, NLP, Time series, scikit-learn, pandas, numpy Data Science & Miscellaneous: A/B testing, ETL, Data Science pipeline (cleaning, wrangling, visualization, modeling, interpretation), Data Mining, Git, Microservices, REST APIs, Docker, Power BI, Product Management

WORK EXPERIENCE:

Research Assistant - Kelley School of Business, Bloomington, IN

May 2021 - Jul 2021

- Worked on Named Entity Recognition (NER) and biography parsing using StanfordCoreNLP and NLTK packages
- Designed and developed a one-stop UI to parse biographies in the form of text and files, which saved *more than 50%* of code usability time and expanded its scope of utilization to non-technical professionals

Product Data Analyst Intern - smallcase Technologies Pvt Ltd, Bangalore, India

Jul 2020 - Jan 2021

- Implemented MongoDB queries in Redash to generate *interactive* data visualization *dashboards* which helped the stakeholders to determine and recommend profitable stocks to the clients
- Enhanced the automation pipeline and expedited the process for generation and delivery of *MIS reports by 40% using Google Apps Script*

Co-founder - SPECable, *Mumbai*, *India* N

Aug 2019 - Jun 2020

• Led the development of an *assistive technology* for children having Dyslexia and Dysgraphia helping them read on the go and correct errors dynamically while writing so that they could be *on par with their peers*

PROJECTS AND PUBLICATIONS:

Demand Forecasting for COVID-antibody treatment - Eli Lilly and Company **FBProphet** | ARIMA | LightGBM

- Translated different seasonalities in the COVID-19 cases and delivered *demand predictions* of the new antibody shots made by the company for the *elderly and the obese* using different time-series forecasting techniques
- Presented our results and insights to the *company's leadership* to help them strategize long term solutions

Customer reaction analysis using emotion recognition model |

CNN | LSTM | NLTK | Flask

- Integrated the facial emotion recognition model, sentiment analysis model and an aspect-based LSTM model (Natural Language Processing) to make a *comprehensive hybrid model for reaction analysis*
- This method enhanced the traditional product feedback systems making it more *sensitive to human emotions* $\[\]$

Recommendation System for E-learning portal **N**

Python | Collaborative Filtering

- Clustered the users using user-profiling techniques and *recommended content* to the users based on their content-interaction history and similarity with other peers in the same user pool using *collaborative filtering*
- Using *hybrid filtering methods* for recommendation allows better personalization of content and increases the adaptiveness of the users to learning management systems. Publication eISBN 978-1-7281-2327-1

ACHIEVEMENTS:

- Patent: Analysing the inputs from eyewear with camera, recorder and brain activity sensor (under ownership)
- National Runners up India KPMG Ideation Challenge 2020