

Pranshu Diwan

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Available: **Summer 2021**

EDUCATION

Northeastern University, Boston, MA

Khoury College of Computer and Information Sciences, **GPA: 3.5**

September 2019 - present

Candidate for a Master of Science in Data Science

Expected graduation: Dec 2021

Related Courses: Machine Learning, Algorithms, Linear Algebra, Probability and Statistics, Database Systems

University of Mumbai, Mumbai, India

Bachelor of Technology in Information Technology

July 2015 - May 2019

TECHNICAL SKILLS

Languages	Python 3, SQL, R, Java, C, HTML5, CSS3
Libraries	TensorFlow, Pandas, NumPy, Scikit-Learn, NLTK, SpaCy, Plotly, Gensim, TextBlob
Cloud, Databases	Amazon EC2, AWS Lambda, Google Cloud Platform, MySQL, HSQLDb, Oracle DB
DevOps	Agile Methodology, Jupyter Notebooks, Flask, Heroku, Git, Anaconda
Soft Skills	Presentation, Critical thinking, Intellectual curiosity, Effective communication, Leadership

WORK EXPERIENCE

Associate Data Scientist

Fidelity Investments, Boston, USA

August 2020 – Present

- Presented my work done during the internship to a larger group of Business and Data Science stakeholders.
- Successfully defined and evaluated various potential initiatives to estimate their business value. Projects include performing statistical analysis and **hypothesis testing** to provide better recommendations and applying Machine Learning algorithms to improve Fidelity's fund attrition rate.

Data Science Intern

Fidelity Investments, Boston, USA

June 2020 – July 2020

- Analyzed a set of meeting notes to extract actionable insights and reveal hidden patterns and topics in them. Developed model to perform **Topic Modeling**, Entity Extraction, Sentiment Analysis, and Word Embeddings.
- Communicated regularly with the stakeholders to and gave multiple presentations to various teams.
- Mastered the Agile methodology by completing Fidelity's certified course and participating in Agile meetings

Data Science Intern

Hashtag Loyalty, Mumbai, India (www.hashtagloyalty.com)

June 2018 – July 2019

- Implemented a reinforcement learning model to increase email open rates by 2.6%
- Researched and presented a detailed report identifying current market trends in the food and beverage (F&B) industry by collaborating with the Business Development Team.
- Defined monetizable Key Performance Indicators (KPI's) for our clients.
- Created an ARIMA model to **forecast revenue** of our clients with an accuracy of 12%.
- Trained a model using Natural Language Processing libraries to tag food items in specific categories.

ACADEMIC PROJECTS

Toxic Comments Classification Challenge (Kaggle – Bronze medal, NLP)

- Trained a model (ensembled) capable of detecting different types of toxicity - threats, obscenity, insults, and identity-based hate with an accuracy score of 0.9865 on the leaderboard. (Top 7%)

Predicting Stock Movement using News Headlines (Unsupervised Learning, NLP)

- Predicted the Stock Movement using the top news headlines for the day. Models developed using LSTMs (best accuracy, 87%), ARIMA, and an ensemble of various classification algorithms along with an EDA.

Facial Emotion Recognition (Deep Learning, Deployment)

- Trained a CNN model on AWS EC2 instance to classify facial emotions like happy, anger, surprise, etc. on the FER 2013 Dataset with an accuracy of 65%. Deployed using Flask. Selected for college exhibition.

PUBLICATIONS

Analysis of Facial Emotion Recognition (IEEE)

- Published paper covers datasets and algorithms like Support Vector Machines, Hidden Markov Models, and Convolutional Neural Network used for the task of Facial Emotion Recognition (FER).

Deep Learning based approaches for Recommendation Systems (Springer)

- Accepted paper studies different Deep Learning methods for recommendation systems highlighting important aspects like design and implementation.