

HIMANSHU GOEL

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EDUCATION

New York University, New York

Master of Science — Computer Engineering (CE)

December 2022

Relevant Courses: Introduction to Machine Learning, Introduction to Java, Principles of Database Systems, Applied Matrix Theory

SRM Institute of Science and Technology, India

Bachelor of Technology — Electrical and Electronics Engineering (EEE)

May 2019

TECHNICAL SKILLS

Certifications: Python, Tableau, Python Data Structures, Google Cloud Big Data and Machine Learning Fundamentals, Taming Big Data with Apache Spark and Python, The Git & Github Bootcamp, R Programming A-Z™: R For Data Science With Real Exercises!, The Ultimate Hands-On Hadoop: Tame your Big Data!

Programming Languages: Python, SQL, Java, Tableau

Databases: MySQL, Oracle SQL

Concepts: Data Modeling, Data Warehousing, ETL, Statistical Modeling

Packages and Libraries: Numpy, Pandas, Seaborn, Matplotlib, Scikit-Learn, Tensorflow, Keras

Algorithms: XGBoost, Kernel PCA, Linear Discriminant Analysis, Principal Component Analysis, CNN, NLP, Thompson Sampling, UCB, Eclat, Apriori

Tools / Platforms: Atmel Studio, Arduino IDE, Google Colab, Microsoft Office, bubble.io, Jupyter, Hadoop, Apache Spark

PROJECTS

Machine Learning Projects (Python, Machine Learning)

December 2021—February 2022

• Predicting Crime Rate in a City

- Used Facebook Prophet to predict time series prediction and examined data seasonality across years and months.
- Developed a model with various factors involved in the Crime Rate of Chicago and plotted future trends, with an accuracy of 90%.

• Traffic Sign Classification

- Used CNN (LE-NET network) to classify traffic signs for self-driving cars using Keras API.
- Trained the model on the dataset and obtained an accuracy of more than 92%.

• Email Spam Filter

- Used Naive Bayes classifier to build SMS Spam Classifier.
- Applied Feature Extraction technique to the dataset and NLP to segregate spam emails and improved the efficacy of the system with an accuracy of 87%.

• YELP Reviews

- Used Natural Language Processing to analyze the overall satisfaction of the consumer for any type of service.
- Used time series analysis to understand the rating routines of customers over time.

• Movie Recommender System

- Used an Item-based collaborative filter to build a model from the user's past behavior, and reached an accuracy of 93.5%.
- Visualized the model using to analyze the genre which is famous in different age groups and different regions.

Sales Forecast Model (Python, Machine Learning)

May—May 2021

- Developed a sales forecasting model which predicts future trends of customers based on their estimated salary and age.
- Achieved an accuracy of more than 90% for a given business model using Random Forest Classifier.

A Dual Mode Controlled Wheelchair - Eye and Voice (Python, Machine Learning)

January — May 2019

- Assembled a wheelchair that operates on eye movement and voice using Embedded System and implemented the Matlab software to track eye movement.
- The device can also detect a fall and notify the concerned personnel in case of an emergency and created a program that sends the coordinates of the wheelchair.

IoT Based Smart Stove with Protection Devices

March—May 2018

- Constructed a system to plummet gas (Liquefied petroleum gas) leakage using the Internet of Things (IoT) and Embedded Systems.
- It also involves a smoke detection mechanism and an exhaust fan that sucks out the gas/smoke when produced.

EXPERIENCE

Intern, Eveready Industries India Limited; Noida, India

June — July 2018

- Administered the management department by posting announcements on the website and resolving technical issues with the concerned personnel and led a team of 50 interns dedicated to improving the safety measures inside the power plant.
- Advocated modifications to processes and procedures and contributed to the new design and implementation of new testing methods.

Intern, Bharat Heavy Electricals Limited; Haridwar, India (PLC, SCADA)

Dec 2017 — Jan 2018

- Led 40 interns and implemented PLC and HMI which increased the total efficiency of the plant by 13%.
- Resolved general IT issues, provided desk support, and performed general administrative work.

Intern, NTPC Limited; Noida, India (PLC)

June—June 2016

- Supervised the 55 summer interns and helped to increased efficiency by interfacing electronic devices with AVR.
- Advised interns and mediated effective communication between the management and employees.

LEADERSHIP AND EXTRACURRICULAR ACTIVITIES

• Member, Tandon Consulting Club; New York University, New York

November 2020 — Present

• Marketing Assistant, Graduate Indian Student Association

October 2021 — Present

• Graduate Orientation Leader, Office of Student Activities & Resource Center

August 2021