

Yash Pratap Solanky

Bloomington, Indiana | 812-369-3181 | ysolanky@iu.edu | [LinkedIn](#) | [Github](#)

EDUCATION

Indiana University

M.S. in Data Science

Bloomington, Indiana

January 2021 – December 2022

- Cumulative GPA: 3.6/4
- Relevant Coursework: Elements of Artificial Intelligence, Machine Learning, Applied Algorithms, Advanced Database Concepts

Northcap University

B.Tech. in Computer Science Engineering

Gurugram, India

August 2016 – July 2020

- Cumulative GPA: 7.2/10
- Relevant Coursework: Python, R, Data Structures, Artificial Intelligence, Java, Analysis and Design of Algorithms, Machine Learning

TECHNICAL SKILLS

Programming Languages Python, SQL, Java, R

Libraries NumPy, Pandas, Seaborn, Scikit-Learn, Pytorch, TensorFlow, BeautifulSoup

Skills Machine Learning, Database Management, Natural Language Processing, Web Scraping, Data Visualization

WORK EXPERIENCE

Graduate Research Assistant

Department of Sociology, Indiana University

08/2021 - Present

Bloomington, Indiana

- Conducted topic modeling and text classification on large-scale social media dataset.
- Programmed machine learning models using algorithms such as Naïve Bayes and Support Vector Machines (SVM).
- Implemented multiple deep learning models using Keras, including an LSTM model.
- Developed a program in Python to retrieve link information and images from a dataset containing over 1 million URLs.

School of Medicine, Indiana University

Bloomington, Indiana

- Configured and maintained a database to store the historic and current data of 10,000+ students in medicine courses.
- Deployed this database using PostgreSQL on Indiana University's Research Database Complex (RDC) to be used for queries and data analysis.

Chatbot Intern

Eli Lilly and Company

05/2021 - 06/2021

Indianapolis, Indiana

- Streamlined an SAP chatbot to improve customer experience by cutting down the information retrieval time from 60 seconds to less than 10 seconds.
- Developed the chatbot using JavaScript and deployed it on Microsoft's Azure Bot Service.

ML/AI Intern

Pratham Education Foundation

10/2020 - 12/2020

Delhi, India

- Built a machine learning model using Python's graphviz library to generate a knowledge graph, given any textbook
- Performed data collection, management and cleaning for a speech recognition machine learning model to be used to evaluate responses of children to arithmetic problems.

Data Analyst Intern

QUANTM Limited

05/2019 - 07/2019

Gurugram, India

- Executed data pre-processing tasks like cleaning and reduction on company datasets and performed the visualization of key performance indicators.
- Assembled a machine learning model to help maximize the conversion rate of a travel eCommerce [website](#).

PROJECTS

Cryptocurrency Price Predictor

Spring 2022

- Analyzed and predicted the effect of the pandemic on the price of specific cryptocurrencies like BTC, ETH and LTC.
- Implemented AR, ARIMA and ES algorithms in Python using statsmodels library. Additionally, explored Facebook's prophet library.
- Deployed the model on Google Cloud Platform's AI Platform and stored the result in a GCP bucket linked to Github.

Multilayer Perceptron

Spring 2022

- Modeled a multilayer perceptron using only the Numpy library in Python.
- Implemented backtracking as well as activation functions such as sigmoid, tanh and ReLu.
- Performed functions like one hot encoding without the use of Scikit-Learn library.

Optical Character Recognition Model

Fall 2021

- Designed a machine learning model to read alphanumeric text from images by scanning and comparing individual pixels.
- Tested Naïve Bayes algorithm and Viterbi algorithm. The latter proved to be more accurate than the former by 16%.