Akanksh Gatla

553 Niagara Falls Blvd, Buffalo, NY, 14226

Education

State University of New York, Buffalo

August 2022 – December 2023

Master of Science in Computer Science

Buffalo, New York

Technical Skills

Languages: C/C++, Python, R, Javascript, HTML, CSS, SQL, Latex, Verilog

Libraries: C++ STL, Python Libraries

Developer Tools: Visual Code Studio, Jupyter, Github

Frameworks: Flask, Django

Cloud/Databases: MongoDb, Relational Database(mySql), PostgreSQL, Amazon Web Services EC2

Data visualization: Tableau, Power BI

Areas of Interest: Data Science, Cloud Computing, Virtualization

Soft Skills: Problem Solving, Self-learning, Presentation, Adaptability, Motivating

Projects

Retrieval Based Chatbot | Python, Flask, VM instance(GCP), API based Scraping

September 2023

- Gathered data from the Wikipedia open-source platform, curating a dataset to train and fine-tune chatbot's responses for specific topics of interest.
- Programmed chatbot to provide informative and coherent answers to a wide range of user queries, from general inquiries to specialized topics sourced from old discussions.
- Executed robust solutions to address various challenges in chatbot development, including handling user input, generating responses, and refining model's performance.

Global Super Store - CRUD APP | Python, PostgreSQL, Triggers, Functions, Views, HTML, CSS

April 2023

- Developed a robust e-commerce platform with real-time data tracking, automated cart updates, and secure payment processing, catering to a range of businesses, from Walmart to Retailers.
- Performed complex SQL queries, triggers, functions, and views, in **PostgreSQL** for efficient data management.
- Created a user-friendly web interface leveraging HTML and CSS, providing intuitive to visualize and analyze data.

Computer Architecture 8-bit Processor | Verilog, FPGA-board

March 2023

November 2023

- Successfully designed and implemented an 8-bit processor using Verilog and Xilinx Vivado, which included simulation and synthesis of the Verilog code and testing of the resulting **FPGA** hardware.
- On Top was assigned to handle other students and guide. Demonstrated programming by independently completing a complex project utilizing tools such as **Vivado** and Verilog.

Health Care Application | Python, Flask, AWS EC2, Tableau, HTML, CSS, JavaScript, Machine Learning April 2022

- Accomplished Random Forest Classifier for disease prediction, achieving [accuracy/result metrics].
- Developed backend deploying Flask, creating API for data processing. Designed an interactive web interface with HTML, CSS, and JavaScript.
- Hosted application on AWS EC2 instance operating Putty, with a Tableau dashboard for patient statistics integration.
- Guided a team of Five to successful completion of a group project.

Certification

Analytics Vidya

Data Analysis with Python: Zero to Pandas

Certificate Link: MFQTSMBTHA

Certificate Link: bywxlo1ygg

Jovian

Proficient in reading/writing CSV data, querying, filtering, sorting data frames, grouping/merging/aggregating data.

• Real-world project demonstrating ability to parse, clean, analyze data using Numpy and Pandas, and create visualizations with Matplotlib and Seaborn.

Introduction to Data Science

• Hands-on experience with Jupyter for data extraction, data cleaning, and building machine learning models.

• Executed linear regression, logistic regression, decision trees, and random forests on multiple real-world projects like NYC taxi trip duration prediction.

Research Publications

Predictions And Analytics In Healthcare: Advancements In Machine Learning Certificate Link: V10I734

International Research Journal of Engineering and Technology

July 2023

May 2020

- Collected and analyzed data using Random Forest machine learning model to predict different types of diseases.
- Developed and trained a machine learning algorithm to predict Breast Cancer, Heart, Liver, Kidney Problems.
- Evaluated the accuracy of the prediction algorithm.
- Presented the results of the research at a LPU conference.