KAJOL

Education

University at Buffalo (SUNY), M.S. in Computer Science

Aug 2022 - Dec 2023

Relevant Courses: Analysis of Algorithm, Machine learning, Data Intensive Computing, NLP

Indian Institute of Information Technology, Lucknow, India, B.Tech in IT

Aug 2015 - June 2019

Relevant Courses: Software Engineering, Database systems, Object Oriented Prog., Operating Systems

Technical Skills

Programming Languages Databases: Python, C, C++, HTML, CSS, JavaScript, SQL, JSON, PostgreSQL, MongoDB Utilities: Postman, Git, GitHub, Jenkins, Docker

Technologies/Frameworks: NodeJs, React, Express, Loopback, Streamlit, Microsoft Power BI, Matplotlib, Plotly-express, Natural Language Understanding (NLU), Natural Language Processing (NLP), Named Entity Recognition (NER), Sentiment Analysis, Topic Modeling, Text Classification, ChatBot, Dialogue Manager, Elasticsearch, Redis, TensorFlow, PyTorch, Sci-kit-learn, SciPy, Pandas, NumPy, Linux, AWS

Experience

Basis - Software Engineer

 $July\ 2020-July\ 2022$

- Developed and executed tech strategy aligned with company goals; led a team of 7 cross-functional engineers to streamline development, testing, and release pipelines based on the product roadmap.
- Collaborated with the product team and **spearheaded the implementation** of the company's flagship revenue-generating product Basis Power Card; applied **Abstraction and Encapsulation** principles of OOPs for flexible server and client development, achieving **80% code reuse** during the pivot.
- Handled server-side integration of third-party tools such as AWS SES, Apple/ Google Sign In, Clevertap (analytics), WhatsApp (customer support), Payment Gateways, Vimeo (video playback), Cloudinary (CDN).
- Led back-end implementation and collaborated with frontend teams to deliver key product features for 100k+ users; integrated MongoDB, and Redis Cache into SQL-based system to handle unstructured data, and created Django admin panel.

Valuefy - Software Developer

July 2019 - June 2020

- Automated invoice generation for wealth advisors to enhance efficiency.
- Implemented Elastic search for reporting and analytics to enable data-driven decisions.
- Developed data reconciliation for transactions and generic document uploads for accurate financial records.
- Translated client requirements through active participation in user requirements meetings.
- Efficiently created and managed a **robust REST API**, encompassing setting crons, sequencing, financial calculations, and engine development.
- Recognized with the Spotlight Award and promoted to full-time SDE within 6 months of internship for exceptional performance.

Projects

Topic-Based Empathic Chatbot (Link)

Feb 2023 - May 2023

- Developed advanced chatbot system with natural, fluid conversations, leveraging NLU techniques and incorporating a re-ranking mechanism for human-like content retrieval.
- Integrated feedback analysis to adapt conversations based on user mood, ensuring personalized and seamless transitions.

Severity Analysis of US-Accidents (Link)

Aug 2022 - Dec 2022

- Analyzed US accident data using Data Cleaning, Exploratory Data Analysis, and five data models (Logistic Regression, K Nearest Neighbors, Decision Tree, Random Forest Classifier, Artificial Neural Network).
- Achieved 0.92 accuracy by selecting the Neural Network based on feature importance.
- Created the React app and used Microsoft Power BI to visualize and display the analysis on the data set.

Eye Gaze Tracking Using Webcam (Link)

July 2018 - Dec 2018

- Built a tool to detect autism at a pre-clinical stage so that proper intervention can be provided for the development of autistic children.
- Did a comparative analysis of three machine learning approaches of autism detection using eye tracking, which are, CNN, DNN, and non-neural network methods-SVM and Random Forest Classifier.

Hand Gesture Recognition Using Kinect Sensor (Link)

Jan 2018 - May 2018

- Developed an application for recognizing hand gestures for controlling the VLC media player.
- Concepts: Data extraction(using HoG feature), classification(Multiclass-SVM).

Extracurricular/ Awards

- \bullet World Rank 175, Google Code Jam to I/O for Women in 2020
- National Talent Search Examination Scholar 2010 (Was amongst Top 1000 Intelligent Students), India
- AIR 22, Women's CodeSprint5,2018