

SAI DAYA SHANKAR GIRIDHAR

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SKILLS

Core Programming : Python, Java, C, C++, R Programming, Scala.
Web Technologies : HTML, CSS, JavaScript, jQuery, AngularJS, NodeJS, ReactJS, RESTful API.
Tools and Libraries : Pandas, NumPy, SciPy, Matplotlib, sci-kit learn, seaborn, TensorFlow, ggplot2, spacy, Beautiful Soup, ChartJS, Spring boot, Spark, Flask, Eclipse, Express, Android Studio, Git, Visual Studio, R Studio.
Visualization Tools : Tableau, Power BI, Weka, Gephi, MS-Excel.
Database : SQL, MYSQL, MongoDB, Big Query, Neo4j, spark SQL.

WORK EXPERIENCE

HIKIGAI Inc, Software Engineer, USA

Sep'23 - Present

- Developed a Python-based Prefix Search service for healthcare data, including allergies, immunization, and medication, integrated with Neo4J and Big Query for expedited data retrieval on the front end.
- Implemented LLMs and developed a Generative AI service to extract patient's insights, alternative medications, and adverse medication reactions from FHIR data, facilitating enhanced decision-making for physicians in tailoring optimal treatment.
- Implemented an NER workflow using Google Healthcare API to parse doctor's visit notes, categorizing findings into Diagnosis, Procedure, Observations, and storing them in FHIR Neo4J.
- Enhanced the performance of Generative AI and Prefix Search services by employing advanced data processing techniques and creating RESTful APIs with Python and Flask.

Vpods Inc, Software Engineer, India

Jan'20 - June'21

- Developed operational dashboards with improved visibility into the company's operations and better decision-making.
- Implemented an orchestration platform for operational dashboards using a cloud provider's IaC services, resulting in improved efficiency and cost-effectiveness through automation and cloud infrastructure management.
- Revamped front-end applications by implementing advanced drag-and-drop interfaces and a comprehensive user management feature. This resulted in a 25% rise in user engagement and 15% improvement in user retention rates, demonstrating the success of the updated design.

Sakha Global, Software Engineer, India

Oct'18 - Jan'20

Hopscotch.in

- Developed a product category page using ReactJS and Spring Boot, resulting in a 25% improvement in page loading speed, leading to enhanced user experience and better website performance.
- Implemented a full-screen view for images in the product detail page with pinch-to-zoom-in features with three types of zoom(1x, 1.5x, 3x).
- Integrated wechatAPIs for prototype shipment tracking functionality in the Shipment tracking page and added customer notification feature once the shipment is delivered.
- Designed an architecture to convert Angular code to ReactJS, resulting in a 40% reduction in development time, leading to fewer errors and enhanced development process efficiency.

Knowledge Podium

- Improved functionality and responsiveness of MyCourses module by implementing lazy loading.
- Developed an API for Contact Us module with an automatic mailing feature using Spring Boot and ReactJS.
- Built a user creation dashboard by implementing password hashing and multi-factor authentication.
- Implemented an automatic mailing mechanism for admin approval or rejection of users, resulting in a 60% reduction in administrative workload and a 30% increase in user satisfaction due to faster account activation.

Datinf Pvt Ltd , Product Engineer II, India

May'18 - Oct'18

- Developed an user Dashboard, Implemented roles and permission modules in admin dashboard to assign particular permissions while creating an user.
- Integrated dynamic charts and graphs using canvas JS, enhancing the visual representation of data and making it easier to identify trends and patterns, leading to more informed decision-making.

CAPSTONE PROJECT

Talent Acquisition Tagging, Allwyn Corporation, USA

Jan'23 - May'23

- Developed a module for skill extraction from resumes and job descriptions using NLP and ML techniques.
- Built a preprocessing pipeline to remove noise and irrelevant data.
- Implemented Phrase matcher and used Spacy Library to extract the relevant skills from the resume and Job description
- Vectorized the structured data using TF-IDF vectorizer, and applied cosine similarity to measure the vector similarity between a resume and Job description skills.
- Developed an API using Flask to publish the extracted skills and similarity scores of Resumes and Job descriptions for easy integration with other systems.

EDUCATION

George Mason University, Fairfax, USA

Aug'21 - May'23

Master's in Data Analytics Engineering

Relevant coursework: Big Data Analytics, Database Management systems, Information Representation, Processing and visualization, Data Mining for business analytics, Operational research on applied predictive analysis, Social Network Analysis.

Anna University, India

Aug'14 - Mar'18

Bachelor's in Computer Science Engineering

Organizer, Web – O – Mania - Technical Symposium, March 2017

PROJECTS

Airline Delay and Cancellation

- Conducted Exploratory Data Analysis on the "Aircraft delay data" of 2017.
- Identified correlations among attributes using heatmap and dropped the attributes which displayed no linear trend.
- Employed classification models like Naive Bayes, SVM, Logistic Regression, and Random Forest to predict aircraft delay and Naive Bayes was successful with 84% of accuracy.

Network Analysis on Alexa's Privacy Issue

- Developed a Python script to extract tweets related to Alexa and smart home appliances from Twitter.
- Performed NLP-based tokenization, lemmatization, and vectorization to process data.
- Applied Naive Bayes algorithm to determine the sentiment polarity of the dataset.
- Built a network model using the Gephi tool and visualized the tweets based on locations and polarity of the tweets.

NYC Parking violation Analysis

- Performed EDA on NYC ticket violation dataset of more than 3.5 million rows stored in MongoDB using Pyspark and Sparkshell to gain insights on the violation pattern in NYC 2017.
- Enhanced parking violation trend analysis using SparkSQL for optimized enforcement and regulation implementation, resulting in improved traffic flow and increased revenue.

Predicting Credit Card Cancellations

- Pre-processed the "Credit Card Cancellation" dataset using R programming, optimizing the data with feature engineering, scaling, resizing, and one-hot encoding for efficient machine learning modeling.
- Applied Logistic Regression, KNN, and Random Forest algorithms to predict customer status, achieving an accuracy rate of 85% with Random Forest resulting in 10% increase in the identification of potential credit card cancellations.

Exploratory Data Analysis On Dulles Airport 2016

- Cleaned the flight dataset and performed visualization including line charts, bar graphs, scatter plots, and pie charts, using ggplot library to gain insights into the data.
- Used scikit-learn to identify patterns and relationships in the data, resulting in finding the best and peak time to fly.

ACHIEVEMENTS

- App Developer Award, Sri Krishna College of Engineering and Technology **2017**
- Winner, Polyglot, Programming contest, VIT Gravitas **2015**
- Winner, Code – o – Poly, Programming Contest, VIT Gravitas **2015**