# SIDDHARTH P SANTHOSH

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# **SUMMARY**

BTech graduate with a strong foundation in programming and software development, proficient in Python, R, and SQL. Experienced in writing clean and efficient code and debugging. Skilled in statistical analysis and problem-solving, with a passion for leveraging technology to develop innovative solutions. Seeking a challenging role as a Fresher Developer to apply technical expertise, contribute to impactful software applications, and grow in a dynamic and forward-thinking environment.

# **EDUCATION**

Data Science & AI (Certificate course) **Keltron Knowledge Centre** 

Bachelor of Technology,
Computer Science

APJ Abdul Kalam Technological
University
2020-2024

Higher school

Mount Bethany Public School,

Kumbazha
2019-2020

# **SKILLS**

• ML & Data Science (Technical skills): Scikit-learn, PyTorch, Keras, NumPy, pandas, TensorFlow, NLP, Jira, Agile,

AI Agents, CNN, RNN

Programming Languages: Python, HTML5, CSS3, C, R

Data Analysis & Visualization Tools:
 Excel, Tableau

• Database Management: MySQL

IDEs:
 RStudio, Visual Studio Code, Neovim

Soft Skills: Problem-solving, critical thinking, collaboration, adaptability,

Time management, attention to detail

#### PROJECTS, PAPERS & EXPERIENCE

# Smart Medical Prescription Service

- Developed a web application for generating smart medical prescriptions using CSS, HTML, Bootstrap, JavaScript, PHP, and SQL.
- Integrated a wiki-like medical help API to provide detailed medicine information based on user input.

# Paper on Decentralized Audiobook Platform

(DOI: 10.15680/IJIRCCE.2024.1205235)

- Developed a decentralized platform using IPFS and Web3, enabling users to upload audiobooks and earn monetization.
- Leveraged blockchain for secure transactions and efficient content storage.
- Integrated NFT creation for audiobooks to protect intellectual property, foster global accessibility, and empower community governance through DAOs.

# Anti-Money Laundering (AML) System using ml and blockchain

- Developed a blockchain-integrated AML system using Streamlit and decision tree algorithms to detect and classify suspicious transactions.
- Combined transparent, tamper-proof data storage with machine learning to analyse transaction patterns and flag potential money laundering activities effectively.

# **Decentralized Audiobook Platform**

- Developed a decentralized platform using IPFS and Web3, allowing users to upload audiobooks and earn monetization.
- Leveraged blockchain for secure, transparent transactions and content storage.

# AI Resume Analyzer

- Built an AI-driven resume analysis tool using Python and Streamlit to evaluate resumes against job descriptions and offer tailored improvement suggestions.
- Applied natural language processing (NLP) techniques to extract and assess critical skills, work experiences, and qualifications.
- Developed an intuitive interface to simplify usage, enabling users to refine their resumes for higher chances of job application success.

#### Transformer Model from Scratch

- Built a transformer model from scratch using TensorFlow, gaining hands-on experience in deep learning architecture design.
- Implemented custom attention mechanisms, positional encoding, and multi-head self-attention to enhance model performance.

# House Price Prediction System with MLOps

- Developed an end-to-end house price prediction system by integrating MLOps principles
- Leveraged advanced regression models (e.g., XGBoost, Random Forest) to predict house prices based on features like location, size, and amenities.

# Neural Network for Time Series Forecasting

- Developed a deep learning model using LSTM/GRU networks to forecast future trends in time-series data such as stock prices, sales, or weather patterns.
- Trained the model on historical data to capture temporal dependencies and evaluated its performance using metrics like RMSE for accuracy. Leveraged frameworks like PyTorch and Keras to build, train, and fine-tune the model for robust predictions

# AI-Powered Object Detection in Real-Time Video

- Designed and implemented a real-time object detection system using pre-trained YOLO models to identify and classify objects such as people and vehicles from video feeds
- Integrated TensorFlow and OpenCV to process video frames and implement real-time tracking of moving objects, with results displayed in a user-friendly interface.
- Leveraged convolutional neural networks (CNNs) to enhance detection accuracy and optimize performance for live video analysis.

# AI Agent Chatbot

- Built an AI-powered chatbot using advanced natural language processing (NLP) techniques to engage in meaningful conversations on various topics.
- Integrated machine learning models to understand user queries and provide relevant, context-aware responses, enhancing user experience and interaction. Designed with scalability in mind, the chatbot continuously improves its understanding through training and feedback.

# Data Science Consultant | Freelance

- Assisted a social media influencer in optimizing content strategy, engagement, and growth by analysing audience data, engagement patterns, and trends.
- Utilized data science tools and techniques to provide actionable insights that drive content success and enhance brand visibility.

# **Dashboard Application for Shopping Mall Data**

- Created an interactive dashboard in Tableau to visualize and analyse key metrics of shopping mall data, such as foot traffic, sales performance, and customer demographics.
- Designed intuitive visualizations that enable real-time insights, helping mall management optimize operations, enhance customer experience, and make data-driven decisions.

# **CO-CURRICULAR ACTIVITIES & HOBBIES**

- Astrophotography as a creative and technical pursuit.
- Attending industry-relevant workshops and seminars.
- Writing blogs or articles on technology or astronomy topics.
- Volunteering for educational or technical initiatives.

# **LEADERSHIP**

- Conducted and managed several academic events such as Industrial visit (IV), different department events, college arts festival...etc
- Actively participated in guiding junior students, conducting various projects and actively involved in extra-curricular activities such as sports