

# GAUTHAM VIJAYARAJ

MACHINE LEARNING - ARTIFICIAL INTELLIGENCE - DATA SCIENCE

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## EDUCATION

<b>Master of Science: Computer Science (Cybersecurity)</b>	<b>May 2025</b>
Arizona State University, Tempe, AZ	CGPA: 3.83/4.00
<b>Bachelor of Technology: Computer Science and Engineering</b>	<b>May 2021</b>
SRM Institute of Science and Technology, Kattankulathur, India	CGPA: 3.33/4.00

## SKILLS

**Programming Languages:** Python, Java, JavaScript and SQL

**Frameworks:** NumPy, Pandas, Matplotlib, Scikit-Learn, Keras, TensorFlow, Seaborn and OpenAI

**Tools:** ChatGPT, Gemini, Git, GitHub, Jupyter Notebook, Kaggle, Microsoft, Linux, AWS and Docker

**Other Skills:** Prompt Engineering, Data Modeling, Feature Extraction, Preprocessing, and Algorithm Optimization

**Publications:** One conference publication at the 3<sup>rd</sup> IEEE AIIoT 2024 ([Link](#))

**Certifications:** Oracle Certified Generative AI Professional and others - <https://gauthiii.github.io/#Certifications>

## PROFESSIONAL EXPERIENCE

<b>Flutter Full-Stack Developer   Metfolio</b> , London, United Kingdom	<b>December 2022 – March 2023</b>
<ul style="list-style-type: none"><li>Developed and integrated predictive analytics using linear regression and data visualization features into the UI design of a Fintech application, resulting in a 20% increase in user engagement.</li><li>Implemented ML based anomaly detection using Isolation Forest algorithms to resolve conflicts and integrated Facebook Ad SDK and HubSpot for real-time event tracking.</li></ul>	
<b>Assistant System Engineer   Tata Consultancy Services Limited</b> , Chennai, India	<b>June 2021 – November 2022</b>
<ul style="list-style-type: none"><li>Enhanced account security by leveraging machine learning-based security measures using Azure MFA for UK clients.</li></ul>	
<b>Full-Stack Developer   Freelance</b> , Chennai, India	<b>June 2019 – May 2021</b>
<ul style="list-style-type: none"><li>Deployed collaborative filtering models to enhance user personalization and recommendations for an e-commerce website, implemented data analytics dashboards, leading to a 15% increase in user engagement and sales conversions.</li></ul>	

## INTERSHIPS

<b>Software Developer Intern   HCLTech</b> , Chennai, India	<b>May 2024 – August 2024</b>
<ul style="list-style-type: none"><li>Gained proficiency in prompt engineering for Generative AI models, optimizing AI-driven solutions to enhance user interactions and drive innovative applications across various domains.</li></ul>	

## PROJECTS

<b>Playlist Prediction App Using Spotify API   Data Science and ML</b>	<b>May 2024 - Present</b>
<ul style="list-style-type: none"><li>Trained a Random Forest model to predict playlists based on audio features from a custom dataset of 35,000 songs collected via the Spotify API and integrated it on a Flutter-based mobile application.</li></ul>	
<b>Sentiment Analysis on Twitter Datasets   Statistical Machine Learning</b>	<b>March 2024 – May 2024</b>
<ul style="list-style-type: none"><li>Implemented SVM and Logistic Regression to achieve an accuracy of 97% on sentiment analysis of 400,000 entries of tweets, while demonstrating expertise in data preprocessing, optimization, vectorization, and statistical analysis.</li></ul>	
<b>AI Based Fitness Tracking Application   React, Firebase and PoseNet</b>	<b>December 2023 – March 2024</b>
<ul style="list-style-type: none"><li>Created a fitness tracking website using React and integrated PoseNet to predict the accuracy of users' workouts.</li></ul>	
<b>Detection Process of Suspicious Activities in Social Media   Data Mining and ML</b>	<b>August 2023 – December 2023</b>
<ul style="list-style-type: none"><li>Established accurate social media account classification into suspicious or non-suspicious categories, aiming to eliminate false grouping.</li></ul>	
<b>GPT response-based customized Chatbot App   OpenAI, Gemini and Cloud Firestore</b>	<b>July 2023 – February 2024</b>
<ul style="list-style-type: none"><li>Developed an intelligent chatbot using OpenAI and Gemini API keys, integrating Cloud Firestore for efficient data storage and retrieval, which improved user query response times by 35%.</li></ul>	
<b>Automated Real-time Expense Tracker Application   Flutter, Firebase and ML</b>	<b>October 2022 – November 2022</b>
<ul style="list-style-type: none"><li>Applied Linear Regression Model for future expense prediction based on historical weekly user expenditures.</li></ul>	
<b>Facial Recognition enabled Social Networking Application   Flutter, Firebase and ML</b>	<b>August 2020 – May 2021</b>
<ul style="list-style-type: none"><li>Utilized TensorFlow-based FaceNet with 98.7% accuracy to assess feature similarity in user images for authentication.</li></ul>	