

R Mathan Kumar

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Education

Sathyam International School SSLC (Percentage: 86)	Jun 2019 - May 2020 Tiruppur, Tamil Nadu
Sathyam International School HSC (Percentage: 86)	Jun 2021 - May 2022 Tiruppur, Tamil Nadu
SNS College Of Engineering <i>Bachelor of Technology in Artificial Intelligence and Data Science (GPA: 8.4)</i>	Nov 2022 - Jun 2026 Coimbatore, Tamil Nadu

- **Relevant Coursework:** Data Structure and Algorithms(Python),Machine Learning,Deep Learning, AI Fundamentals,Cloud Computing.

Experience

SNS I-Hub <i>App Development</i>	Jun 2024 – Dec 2024 Coimbatore, Tamil Nadu
<ul style="list-style-type: none">• Architected a centralized real-time telemetry dashboard for campus-wide water infrastructure, streamlining operational oversight and enabling data-driven resource management across the network.• Collaborated on the design of high-concurrency database schemas optimized for the rapid ingestion of sensor data, ensuring high data fidelity and seamless synchronization for consumption tracking.• Engineered sophisticated data visualization modules to transform raw volumetric flow metrics into predictive insights, facilitating the proactive identification of system anomalies and potential leakages.• Deployed automated control algorithms within the monitoring system to synchronize water distribution, significantly mitigating manual operational overhead and optimizing resource allocation efficiency.	

Projects

Deepfake Detection System Python, PyTorch, OpenCV, CNN, LSTM	Dec 2024
<ul style="list-style-type: none">* Engineered a high-precision deep learning pipeline utilizing CNNs for spatial feature extraction and LSTM networks for temporal analysis to detect manipulated media.* Leveraged the FaceForensics++ dataset to train and validate models, achieving significant accuracy in identifying facial inconsistencies and subtle temporal artifacts.* Optimized image preprocessing workflows using OpenCV to enhance model robustness against various compression formats and lighting conditions.	
Financial Data Analytics Engine Python,SQL,Apache Spark, Pandas, NumPy, Fast API	Aug 2025
<ul style="list-style-type: none">* Architected a scalable data processing engine using Apache Spark and SQL to analyze large-scale financial datasets for trend identification and performance auditing.* Applied advanced statistical forecasting models to evaluate investment risks and generate actionable insights for strategic financial planning.* Streamlined data transformation and cleaning pipelines, reducing data latency and ensuring high-fidelity metrics for complex budgeting optimizations.	

Technical Skills and Certifications

Languages: Python,SQL,Kotlin.

Technologies: PyTorch,Apache Spark,MongoDB,Android Studio,Fast API,FireBase,Power BI,Git/GitHub.

Certifications: AWS Cloud - Generative AI Foundations, Kaggle - AI Agent Foundation.