

# STEPHEN RAJ T

## AI & Data Science Engineer

Cuddalore, Tamil Nadu | +91 9790634174 | stephenbugi525@gmail.com  
LinkedIn: stephen-raj-ai | GitHub: T-Stephen

### PROFESSIONAL SUMMARY

Forward-thinking **B.Tech AI & Data Science Student** delivering enterprise-grade solutions in **Computer Vision**, **Generative AI**, and **Cloud Infrastructure**. Proven expertise in deploying real-time **YOLOv8** models and optimizing scalable pipelines using **AWS** and **Python**. Committed to engineering high-performance systems that drive technical excellence.

### TECHNICAL SKILLS

<b>Languages:</b>	Python, JavaScript, HTML5, CSS3
<b>AI &amp; Frameworks:</b>	YOLOv8, OpenCV, Pandas, NumPy, FastAPI
<b>Databases:</b>	MongoDB, MySQL, Firebase
<b>Tools &amp; Cloud:</b>	AWS, Docker, Git/GitHub

### PROFESSIONAL EXPERIENCE

<b>Big Bucks Innovation Pvt Ltd</b>	<b>July 2025 – August 2025</b>
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Data Science Intern | Chennai, TN

- Optimized ML model training speed by **30%** through advanced data pre-processing using Pandas and SQL.
- Engineered automated testing protocols for ML pipelines, reducing deployment-stage errors.
- Collaborated with engineering team to architect predictive analytics tools for market trends, achieving **95%** accuracy.

### KEY PROJECTS

<b>Intelligent Traffic Management System</b>	<b>Oct 2025</b>
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Lead Developer | Tech: YOLOv8, AWS, OpenCV

- Developed a Real-Time Computer Vision System using **YOLOv8** and **OpenCV** achieving **98%** detection accuracy.
- Deployed on AWS Cloud Services with endpoint optimization and scalability validation.
- Reduced average intersection wait times by **40%** via Hyperparameter Tuning.

<b>MongoDB 'Hack-and-Go' Hackathon</b>	<b>Jan 2026</b>
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Solo Developer | Tech: MongoDB Atlas, Python

- Architected a high-performance database solution using **MongoDB Atlas** and **Python** for flexible schemas.
- Optimized query performance by implementing advanced indexing strategies and aggregation pipelines.

<b>Multi-Lingual Sentiment Analysis Engine</b>	<b>Sep 2025</b>
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NLP Engineer | Tech: BERT, FastAPI

- Architected a **BERT** based Transformer model integrated into a **FastAPI** microservice.
- Achieved **92%** validation accuracy on the HuggingFace benchmark dataset for social sentiment.

### CERTIFICATIONS

<b>AWS Certified AI Practitioner</b>	- Amazon Web Services	<b>2025</b>
<b>MongoDB Python Developer Path</b>	- MongoDB	<b>2026</b>
<b>OCI Generative AI 2025 Professional</b>	- Oracle Cloud	<b>2025</b>

### EDUCATION

<b>SSM Institute of Engineering and Technology</b>	<b>Expected 2027</b>
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B.Tech in Artificial Intelligence & Data Science

- CGPA: 7.5 / 10.0

<b>St. Antony's Matric Higher Secondary School</b>	<b>2023</b>
HSC (12th Grade)   Neyveli	