

# SAHANA JAYASIMHA HOLKAL

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## SUMMARY

Master's student in Computer Science with 3 years of experience in automation, cloud-native platforms, and data security. Skilled in optimizing systems for security and efficiency, with a proven track record in real-time monitoring and disaster recovery. Currently focused on Artificial Intelligence and Machine Learning, with the goal of building purposeful, human-centered solutions that drive accessibility and innovation.

## TECHNICAL SKILLS

**Languages:** Python, Java, SQL, C.

**Frameworks & Tools:** AWS (S3, Lambda, EC2, Quicksight, Athena), Streamlit, LangChain, Git, Postman, JMeter

**AI/ML:** PyTorch, TensorFlow, Scikit-learn, OpenCV, Cohere

**Concepts:** Data Structures & Algorithms, Cloud Computing, Automation, LLM Orchestration, Data Visualization

## EDUCATION

**Arizona State University**

*MS in Computer Science - 4.0*

Tempe, USA

**May 2027 (Expected)**

**Bangalore Institute Of Technology**

*BE in Computer Science - 8.94*

Bangalore, India

**July 2022**

**Publications and Certifications :**

[Sign Language Recognition System publication , IJISRT22JUL728](#) ; Neural Networks and Deep Learning, DeepLearning.AI, Coursera , (Aug 2020) , AWS Cloud Practitioner (Ongoing) , Data Science Bootcamp 2023.

## PROFESSIONAL EXPERIENCE

**Fidelity Investments**

*Data Engineer*

Bangalore, India

*August 2022 – June 2025*

- Implemented automation and built a cloud-based dashboard that streamlined complex data flows, **saving 30+ hours** weekly and boosting efficiency completely on AWS Quicksight and Athena.
- Enhanced data security** by onboarding a **sensitive data discovery tool**, scanning hundreds of schemas to detect and safeguard PII in the data lake.
- Led API testing** and **rebuilt disaster recovery architecture** for a cloud-native data tokenization solution on AWS, ensuring resilience and availability.

**Cognitive Clouds**

*Software Development Intern*

Bangalore, India

*September 2021 – October 2021*

- Internship in API testing with Postman Monitor and Apache JMeter; automated workflows, implemented mock servers, and performed load/stress testing.

## ACADEMIC PROJECTS

**Clickless AI Grocery Agent**

*Oct 2025 - Dec 2025*

Developing a **clickless AI** tool that scrapes grocery platforms and uses **multi-agent orchestration** to compare prices, recommend the best choice, and autonomously complete the purchase process.

**Paperclip - Research Assistant - Sunhacks(Hackathon)**

*Sept 2025 - Dec 2025*

Built an AI-Agentic powered research assistant using multi-agent orchestration and UI integration to streamline the end-to-end research process. [Github link](#).

**Deep Learning for Medical Image Analysis**

*Aug 2025 - Dec 2025*

Trained ResNet18/50, CNN, Ark, and U-Miss+ on MedMNIST, CheXpert, and ChestMNIST (18+ 2D/3D datasets) for lesion segmentation and lung disease classification, targeting state-of-the-art accuracy and robustness.

**Sign Language Recognition System**

*July 2022*

Developed a deep learning system for sign language recognition using SSD, 2D/3D CNNs, and LSTMs with Depth and RGB inputs, integrating multimodal data for robust feature extraction and training with Python, TensorFlow, Keras, and OpenCV.

## LEADERSHIP EXPERIENCE

**Rotaract Bangalore West** - *Vice President, Treasurer, Secretary* | **Tedx BIT Bangalore** - *Creative team head*