



# Sirichandana Bomma

## Full Stack Machine Learning Engineer

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[LinkedIn](#) | [GitHub](#) | [Portfolio](#)

[Medium](#) | [Academia](#)

### PROFESSIONAL SUMMARY

- Experienced Machine Learning Engineer specializing in Generative AI, proficient in Python and advanced AI frameworks like TensorFlow, PyTorch, and JAX. Expert in deploying Large Language Models (LLMs), diffusion models, and GANs, with a strong foundation in NLP, multimodal AI models, and ethical AI practices.

### FEATURED ACCOMPLISHMENTS

- Generative AI Model Development:** Spearheaded the development and deployment of advanced Generative AI models (LLMs, GANs) at 7Stones Tech LLC, improving clinical AI systems' accuracy and efficiency by over 30%.
- NLP and Transformers Implementation:** Implemented NLP techniques using transformers such as BERT and GPT at Zensar Technologies, enhancing fraud detection capabilities by 25% and reducing false positives in automated systems.
- AI Model Deployment in Production:** Designed and executed robust deployment strategies using Docker and Kubernetes, significantly optimizing the real-time performance and scalability of AI solutions on cloud platforms (AWS, GCP, Azure).
- Ethical AI and Bias Mitigation:** Led initiatives to integrate responsible AI practices in model development, focusing on transparency and fairness, notably reducing bias by 40% in predictive modeling at healthcare interfaces.

### SKILLS

- Programming Languages & Frameworks:** Python (TensorFlow, PyTorch, JAX), React.js, Next.js
- AI & Machine Learning:** Generative AI models (LLMs, GANs, Diffusion Models), NLP, Transformers, RLHF, Prompt Engineering, Multimodal AI models
- Deployment & Cloud:** Containerization (Docker, Kubernetes), AWS, GCP, Azure, API integrations, Microservices
- Data Handling & MLOps:** Vector databases (Pinecone, FAISS), Retrieval-Augmented Generation (RAG), Model Versioning, Monitoring, Lifecycle Management

### PROFESSIONAL EXPERIENCE

Machine Learning Engineer | 7Stones Tech LLC

July 2024 – Present

- Developed AI-powered clinical document classification systems, leveraging LLMs & NLP frameworks (spaCy, Hugging Face, OpenAI, LangChain).
- Implemented FHIR-compliant AI pipelines, ensuring seamless EHR data processing & standardization.
- Developed and fine-tuned generative AI models for healthcare, improving accuracy and efficiency.
- Implemented MLOps best practices, ensuring scalable and maintainable AI solution deployments.



- Developed and optimized **retrieval-augmented generation (RAG) techniques**, enhancing **clinical documentation accuracy**.

**Software Engineer | Zensar Technologies Limited, Hyderabad, India**

**Aug 2021 - July 2022**

- Built **NLP-driven fraud detection models** for **healthcare claims processing**, improving **risk mitigation accuracy**.
- Built and deployed **NLP-driven models**, enhancing fraud detection systems for healthcare claims.
- Developed and deployed **cloud-based AI models** for **real-time medical text classification & prediction**.
- Optimized **AI-powered ETL pipelines** to **reduce processing time by 45%**.

**Machine Learning Intern, VITA Technologies, Warangal, India**

**Dec 2020 - June 2021**

- Developed **NLP and computer vision** models for insurance claim processing.
- Implemented **Bidirectional LSTMs and CNNs** for text and image recognition.
- Gained hands-on experience in AI model development and deployment, focusing on insurance claim processing.

**Python Developer Intern, VITA Technologies, Warangal, India**

**June 2020 - Nov 2020**

- Designed and developed backend data processing scripts using Python for automating client report generation.
- Created RESTful APIs using Flask to enable seamless communication between front-end applications and database services.
- Assisted in optimizing legacy Python code to improve runtime performance by up to 35%.
- Collaborated with a team to implement data validation routines and automate error-handling mechanisms in data pipelines.

## EDUCATION

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**University of North Texas**

Denton, TX, USA

Master's in Information Science; GPA: 3.7

**August 2022 – May 2024**

**Jawaharlal Nehru Technological University**

Hyderabad, Telangana, India

Bachelor of Technology in Computer Science & Engineering; GPA: 3.4

**July 2017 – August 2021**

## CERTIFICATION LINKS

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[Vanderbilt University Certified Prompt Engineering](#)

[Salesforce Certified AI Associate](#)

[IBM Certified Machine Learning Developer](#)

[LearnKartS Certified Kubernetes Application Developer \(CKAD\)](#)

[IBM Certified Enterprise Design thinking Practitioner](#)

[IBM certified Enterprise Design Thinking – Team essentials for AI](#)

[AI in Healthcare by Stanford University](#)

[Data Science with python by SimpliLearn](#)



[Large Language Models by SimpliLearn](#)

[Generative AI by SimpliLearn](#)