T. CHAITHRA

Computer Science and Engineering
IIIT Srikakulam
Expected Graduation: 2025

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CAREER OBJECTIVE

AI/ML Engineer with 1 year of specialized experience in edge AI deployment, model optimization, and embedded system integration. Proven track record in deploying deep learning models on resource-constrained platforms (NXP i.MX8M+, MAX78002) with emphasis on real-time performance and low-latency inference. Seeking to leverage expertise in computer vision, model quantization, and end-to-end AI pipeline development to drive impactful innovation in production-grade AI systems at a forward-thinking organization.

EDUCATION

- **Rajiv Gandhi University of Knowledge and Technologies** — *2021-2025*
  Bachelor of Technology in Computer Science, Andhra Pradesh — CGPA: 8.7
- **Rajiv Gandhi University of Knowledge and Technologies** — *2019-2021*
  Pre-University Course (Mathematics, Physics, Chemistry), Andhra Pradesh — CGPA: 9.56
- **Government High School, Santhipuram, Chittoor** — *2018-2019*
  Secondary School Certificate, Andhra Pradesh — CGPA: 10.0

PROFESSIONAL EXPERIENCE

- **AI/ML Trainee - Edge AI** — *Oct 2025 - present*
  VconnecTech Systems — Hyderabad, India
  - Designed and optimized deep learning models for real-time inference on resource-constrained edge devices, achieving low-latency performance with minimal accuracy loss
  - Deployed computer vision and ML models on embedded platforms including NXP i.MX8M+ and MAX78002, implementing quantization, pruning, and ONNX conversion pipelines
  - Built end-to-end AI workflows: dataset curation and preprocessing, model training and fine-tuning, performance benchmarking, and hardware-accelerated deployment
  - Collaborated with cross-functional teams to validate models in production environments, ensuring stability and meeting real-time constraints for edge applications

- **AI/ML Intern - Edge AI** — *oct 2024 - Sep 2025*
  VconnecTech Systems — Hyderabad, India
  - Developed compiler-level instruction generation in Python for CNN operators using ONNX, translating model graphs into optimized hardware instructions for edge accelerators
  - Designed, trained, quantized, and deployed CNN models using PyTorch and TensorFlow, with ONNX export and ai8x-synthesis integration for MAX78002
  - Applied reinforcement learning–based prefetching using Pythia and analyzed CNN/LLM performance with PyTorch Profiler and TensorBoard to optimize FLOPs, latency, and memory access.
  - Deployed optimized models for ADAS applications (overspeed, wrong-way, triple riding, helmet detection) and worked with Transformer architectures (BERT, GPT) for model fine-tuning and inference.

PROJECTS

- **Crop and Weed Detection** — *Apr 2024 - Jun 2024*
  Internship Project | UniCoverage Technologies (Edunet Foundation)
  - Built a deep learning-based image classification system for automated crop and weed identification in agricultural settings
  - Addressed class imbalance through data augmentation and weighted loss functions; fine-tuned hyperparameters for optimal accuracy
  - Delivered a production-ready model with strong generalization on unseen data, demonstrating practical applicability

TECHNICAL SKILLS

Programming Languages: Python, Java, C/C++, SQL, HTML/CSS, JavaScript (Basics)
ML/DL Frameworks: TensorFlow, PyTorch, Scikit-learn, ONNX Runtime, Keras
Edge AI & Embedded: NXP i.MX8M+, MAX78002, Model Quantization, Pruning, TensorRT, Edge TPU
Data Science Tools: NumPy, Pandas, Matplotlib, Seaborn, Jupyter, Google Colab
ML Techniques: CNNs, RNNs, Transformers, GANs, Transfer Learning, Model Optimization
Developer Tools: Git, Visual Studio Code, Linux, Docker (Basics)
Soft Skills: Problem-solving, Team Collaboration, Communication, Adaptability, Time Management
Competitive Programming: Solved 200+ problems on LeetCode and GeeksforGeeks

CERTIFICATIONS

- Machine Learning with Beginners - Analytics Vidhya
- TechSaksham Foundation Course - Edunet Foundation
- Introduction to Generative AI - Coursera
- Java Programming Basics - HackerRank
- Introduction to Data Science - Coursera

LEADERSHIP & RESPONSIBILITIES

- **General Secretary, Coding Club** - RGUKT Srikakulam (2023-2024)