ABHINAY KOTLA

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LinkedIn   GitHub   Portfolio

SUMMARY

Passionate Computer Science graduate student with a strong foundation in machine learning, deep learning, and NLP. Proven experience in emotion-aware chatbots, image inpainting, and real-time summarization systems. Proficient in TensorFlow, PyTorch, and cloud-scale deployment tools like Docker and Kubernetes. Known for developing lightweight, production-ready AI models and collaborating in research-focused innovation. Actively seeking AI/ML/Data Science internships for 2025 to contribute to generative and autonomous AI solutions.

SKILLS

Programming	Python (Advanced), C++, Java, Scala, R, SQL, Bash
ML & AI	Deep Learning, Generative AI, LLMs, Transfer Learning, NLP, GANs, Feature Engineering
Computer Vision	CNNs, Vision Transformers (ViTs), Image Inpainting, Pose Estimation
Frameworks	PyTorch, TensorFlow, Keras, scikit-learn, OpenCV, Pandas, Spark
Cloud & Big Data	AWS, Google Cloud, Azure, Apache Spark, Hadoop, Kubernetes
DevOps & MLOps	Docker, GitHub Actions, CI/CD, Model Serving, Terraform, Model Monitoring
Data Engineering	ETL Pipelines, Data Wrangling, Streaming Data (Kafka), SQL Optimization
Accessibility	WCAG, Assistive Tech, Inclusive AI Design, Digital Accessibility

Masters in Computer Science　　　　**Dec 2025**
The University of Texas at Arlington
GPA: 4.0/4.0

BE in Computer Science　　　　**April 2023**
Gandhi Institute of Technology and Management, Hyd
CGPA: 8.47

Certifications　• Neural Networks and Deep Learning (DeepLearning.AI)
- Robotic Process Automation (RPA)
- IBM Big Data with Spark and Hadoop
- Wordcloud Using NLP and TF-IDF
- Google Technical Support Fundamentals

More Certifications ←

WORK EXPERIENCE

UT Arlington Office of Information Technology　　　　Aug 2024 - Present
Arlington, TX
- **Graduate Research Assistant – IT for Campus Operations**　　　　Sep 2024 – Present
- Developed an AI-powered tech support chatbot, reducing average ticket handling time by 18% and improving user query resolution accuracy.
- **Graduate Assistant - OIT Tech Support**　　　　Aug 2024 - Sep 2024
- Maintained and improved IT documentation leading to 25% fewer escalated support tickets. Supported systems used by 5,000+ students and staff.

Freelance Web Developer, Saintechinc　　　　Feb 2023 - Nov 2023
- Delivered a secure, full-stack website using React and Node.js with 99.9% uptime and optimized SEO performance.

Internships
- **SmartKnowers**　　　　Jun 2022 - Jul 2022
- Developed course content on ML workflows and deployment practices; improved student engagement metrics by 30%.
- **1StopAI**　　　　Nov 2021 - Jan 2022
- Built a real-time mood and gender classification system for customer support calls, enhancing service personalization and reducing handling time.

Social Media Manager and Creator　　　　May 2021 - Dec 2023
- **Content Manager, SaharaYT** Grew a YouTube channel to 325k subscribers; improved average view retention by 20% using ML-based analytics.
- **Owner/Creator, NukeYT** Created niche content with a 50% higher-than-average watch time; coordinated sponsorship deals and boosted channel discovery.

CLUB ACTIVITIES

Mentor, SCAI Club, UTA June 2024 - Present
· Led workshops on ML foundations; supervised a cryptocurrency trend prediction project with real-time inference models.

Head of Coding and Gaming Division, GITAM COGAAN Jul 2020 - Jan 2023
· Organized 10+ technical events, driving a 2x increase in participation. Delivered hands-on training in coding and gaming AI.

PROJECTS

Edge- and Color-Aware Adversarial Image Inpainting ← Python, GANs, Deep Learning, Computer Vision
Reduced perceptual loss by 7% using dual-GAN architecture guided by edge and color priors; validated on CelebA and Places2 datasets.

Efficient CV Models with Knowledge Distillation ← Python, CNNs, Quantization, PyTorch
Built a 6.5MB student model from a 669MB teacher while preserving 97% accuracy on the Intel image dataset using pruning and FP8 training.

News Summarization using T5 Transformer ← Python, T5, NLP, Transformers
Achieved ROUGE-1: 0.532 and cosine similarity of 0.80; used for generating concise and semantically rich summaries of news articles.

TuneParams.ai Community Platform ← React, Firebase, Firestore, CSS, Auth, Web Dev
Developed a fully functional web-based learning platform and forums for AI and ML discussions. Implemented role-based authentication, real-time Firestore backend, public read access, post-moderation, and a responsive UI. Integrated admin dashboard to manage users, payments, and forums. Deployed with modular services and reusable components.

Road Surface Classification Tool ← Python, scikit-learn, Qt Designer
Built a GUI-based tool to classify road surface types and defects, enabling predictive maintenance with 85% classification accuracy.

More Projects on GitHub ←

INTERESTS AND FUTURE PLANS

Deeply interested in **autonomous systems, robotics, and real-time ML**.

Researching **ViTs, multimodal fusion**, and **generative AI** for applications in vision and language.

Exploring **scalable ML deployment**, model serving, and monitoring via **Kubernetes** and **cloud-native** workflows.

Long-term goal: contribute to **open-source AI research** and advance **responsible, accessible AI**.