# **BHANUPRASADH SANTRA**

#### **EDUCATION**

Bachelor of Technology - Computer Science (CGPA: 7.69),

Nov 2021 – Apr 2025 | Andhra Pradesh, India

Kakinada Institute of Engineering and Technology

• Relevent Courses: Networking, Operating Systems, Data Structures and Algorithms, Databases, Statistics.

#### **SKILLS**

Programming Languages — Python, Go, JavaScript, SQL, Bash, YAML

Frameworks — TensorFlow, PyTorch, Keras, Langchain, Spark, Hadoop, Flask, Django

**Libraries** — Scikit-learn, Hugging Face Transformers, Pandas, Numpy

DevOps & MLOps — Linux, Docker, Kubernetes, Jenkins, Terraform, Ansible, GitHub Actions, ArgoCD, GitOps, MLFlow

Cloud Platforms — AWS, Azure, Google Cloud, Civo Cloud

**Databases** — MySQL, MongoDB, SQLite, PostgreSQL

**Version Control & Tools** — Git/GitHub, GitLab, PowerBI

#### **EXPERIENCE**

AICTE, Cloud GenAI Intern - Remote

Jul 2024 - Present

- Built and deployed generative AI solutions using Google Cloud tools, optimizing workflows for development, data analysis, and security engineering.
- Designed AI-powered applications with Vertex AI and Gemini APIs, improving productivity in code generation, data retrieval, and multimodal processing.
- Applied Responsible AI principles, integrating fairness, bias mitigation, and privacy safeguards into AI models.
- Streamlined operations by implementing AI models for image generation, embeddings-based search, and multimodal data analysis.

#### **PROJECTS**

## Intelligent Customer Support Chatbot, (LLM, RAG, GenAI)

Jan 2025

- Built a GPT-based chatbot with RAG to retrieve domain-specific knowledge.
- Developed a real-time query pipeline using Flask, Elasticsearch, and Pandas.
- Deployed on AWS with Docker, Kubernetes, Terraform, and CI/CD via Jenkins.

### Predictive Maintenance System, (ML, Data Science)

Jan 2025

- Designed a predictive pipeline using TensorFlow and Scikit-learn for sensor data.
- Built ETL workflows with Pandas and SQL, visualized insights using Dash.
- Deployed on Azure AKS with Docker, Ansible, and Jenkins CI/CD pipelines.

# Large-Scale Recommendation System, (Deep Learning, MLOps)

Jan 2025

- Created a recommendation engine with PyTorch and Matrix Factorization.
- Integrated Flask API with GCP Kubernetes and MongoDB for scalability.
- Automated CI/CD with Terraform, Jenkins, and monitored via MLFlow.

# Multi-Cloud Fraud Detection System, (MLOps, Data Science)

Jan 2025

- Built a TensorFlow anomaly detection model with 98% precision.
- Deployed on AWS, GCP, and Civo using Bash, YAML, and Terraform.
- Automated pipelines with Docker, Kubernetes, and Ansible for real-time updates.

# **CERTIFICATIONS**

Cognitive Class, Kubernetes Operators Intermediate□Dec 2024Google Cloud, Developed GenAl Apps with Gemini and Streamlit□Aug 2024Google Cloud, Prompt Design in Vertex Al Skill Badge□Aug 2024Google Cloud, Gemini Multimodality and Multimodal RAG Skill Badge□Aug 2024

### **CODING PROFILE & ACHIEVEMENTS**

- Solved around 200+ python problems, 50+ GoLang problems and 60+ SQL problems on Codechef.
- Earned a Merit Certification for completing the 50-week *Foundations of Modern Machine Learning (FMML)* program at **IIIT Hyderabad**, gaining expertise in ML fundamentals, algorithms, and practical applications.