

BHANU TEJA L

lekkalabhanuteja01@gmail.com | +91 9502806443 | Bengaluru, India

<https://linkedin.com/in/bhanu-teja-l> | <https://github.com/Bhanu7202>

Professional Summary

Computer Science and Engineering graduate with practical experience as a Data Science Intern and specialized training. A quick learner passionate about technology and innovation, with a strong foundation in programming and problem-solving. Adaptable, growth-oriented, and eager to contribute in dynamic, tech-driven environments across diverse roles.

Work history

Data Science Intern, AI Variant

Jan 2025 – Oct 2025 | Bengaluru, India

- Engineered data pipelines and applied Python with ML libraries (TensorFlow, PyTorch, Scikit-learn) to deliver accurate predictive models, showcasing technical expertise and problem-solving.
- Collaborated with diverse teams to translate complex data insights into business strategies, demonstrating communication, adaptability, and teamwork.
- Improved model accuracy through feature engineering and performance evaluation (accuracy, F1-score, ROC-AUC). Documented processes clearly, demonstrating analytical rigor, attention to detail, and consistency across projects.

Skills

Programming Languages – Python, SQL, R, HTML, CSS

Databases & Cloud – MySQL, AWS, GCP (basics), Azure ML (basics)

Machine Learning – Scikit-learn, TensorFlow, PyTorch, XGBoost, PCA, LightGBM, SVM, CNN, K-Means, Decision Trees, Random Forest, DBSCAN

Computer Vision & Imaging – OpenCV, Image Classification, Object Detection

Data Analysis & Visualization – Pandas, Matplotlib, Power BI, NumPy, Seaborn, StatsModels

Model Deployment & MLOps – Streamlit, GitHub, Flask

Statistical & Analytical Concepts – Hypothesis Testing, Regression Analysis, Feature Engineering, Time Series Analysis, Correlation Analysis, EDA

Tools & Developer Platforms – Jupyter Notebook, Google Colab, Visual Studio Code, GitHub

Projects

Music Recommendation Using Facial Expressions

- Engineered emotion-aware recommendations by mapping facial expressions to music choices, solving personalization gaps in generic playlists.
- Implemented real-time computer vision with Python, TensorFlow/PyTorch, and OpenCV, integrating outputs with Spotify API for seamless song selection.
- Delivered 90% emotion classification accuracy and a smoother user experience, increasing engagement through adaptive recommendations.

Customer Churn Prediction

- Designed risk scoring to identify likely churners, enabling targeted retention actions and reducing blind spots in customer lifecycle.
- Developed ensemble models in Python using LightGBM and Random Forest with feature engineering and hyperparameter tuning, deployed via Streamlit.

- Achieved 86.5% accuracy and improved early-warning detection, supporting proactive interventions and cost-effective retention.

Customer Segmentation

- Architected clustering pipelines to segment customers into actionable groups for personalized marketing, addressing heterogeneous behavior patterns.
- Built high-dimensional analysis using Python with Scikit-learn (KMeans, DBSCAN, GMM) and PCA/t-SNE, plus a Streamlit interface for real-time predictions.
- Achieved faster targeting and campaign precision, improving segmentation effectiveness by an estimated 30% through clear clusters and app-driven insights.

Automatic Crop Watering System

- Created an AI + IoT irrigation solution to minimize water waste and optimize crop hydration decisions.
- Integrated soil sensors with Python-driven ML logic on Arduino/NodeMCU hardware, automating control via Blynk Cloud for remote management.
- Impact reduced test-environment water usage by ~25%, demonstrating sustainability and reliable automation in smart farming.

Publications

AI and Sensor-Driven System for Irrigation and Water Waste Minimization,

Apr 2024

International Journal of Engineering Research & Technology

- Developed and published a research paper presenting an AI- and IoT-based irrigation management system that integrates soil moisture, temperature, and humidity sensors with machine learning models to optimize water usage.
- The system leverages Arduino and NodeMCU microcontrollers, cloud-based data processing, and mobile applications for real-time monitoring and automated irrigation control.
- Demonstrated improvements in water conservation, crop yield optimization, and scalability for applications ranging from commercial farms to home gardens and greenhouses.

Education

Bachelor of Engineering in Computer Science and Engineering,
Nehru Institute of Engineering and Technology
CGPA:8.01

Sep 2020 – Jul 2024
Coimbatore, India

Certificates

Data Science, *ExcelR*

AWS Academy Machine Learning, *AWS Foundations*

AWS Academy Cloud, *AWS Foundations*

AI-ML Virtual Internship, *EduSkills*

CCNA: Introduction to Networks, *Cisco*