

# Munukutla Lakshmi Lavanya

LinkedIn: <https://www.linkedin.com/in/lavanya-munukutla/>

GitHub: <https://github.com/Lavanya573>

Email: lakshmimunukutla4@gmail.com

Mobile: +91-9989722377

## SKILLS

- **Languages:** Python, C++, Basic Java, SQL
- **Frameworks & Libraries:** GitHub, HTML, CSS, Django, TensorFlow, Scikit-learn, pandas, NumPy
- **Tools/Platforms:** Jupiter Notebook, Google Colab
- **Soft Skills:** Team Player, Adaptability

## TRAINING

### Adversarial Nibbler Challenge

Oct 2024-Jan 2025

- Designed and tested advanced prompts to evaluate AI image generation models for safety and content guidelines.
- Collected and annotated tricky prompts to check AI behavior and generate safe outputs.
- Reported unsafe outputs to improve model safety and robustness

### Coding Blocks

Jun 2024 – Jul 2024

- Completed hands-on training focused on core concepts of Data Science and Machine Learning, including supervised learning, model evaluation, feature engineering, and data preprocessing.
- Developed a machine learning model to predict house prices based on features such as location, area, number of bedrooms, and bathrooms.
- Implemented algorithms including Support Vector Machine (SVM), Linear Regression, and Random Forest for accurate price estimation, achieving an  $R^2$  score of approximately 0.87

## PROJECTS

### Tripease: Hotel and Tourism Management

Jul 2025

- Designed and developed Tripease – a smart hotel and tourism management web application to streamline hotel bookings, tour package reservations, and guest services on a single platform.
- Implemented role-based access control (Admin, Staff, Guest) and dynamic room/tour management using Django and PostgreSQL for real-time data handling.
- Integrated online payment processing, cart functionality, and notification system for booking confirmations, cancellations, and support

### Image-to-text generation using CNN and LSTM:

Nov 2024

- In this project, a CNN extracts visual features from images, which are then passed to an LSTM for generating captions.
- The LSTM uses image features and prior word predictions to create a sequence of words.
- This combined architecture enables the generation of accurate and descriptive captions for images.
- The model is trained on large datasets of image-caption pairs to improve its performance and generalization, achieving a BLEU score of approximately 0.63

## CERTIFICATES

- Basic HTML & CSS Mar 2025
- Elite Badge Certificate on Cloud Computing – NPTEL Nov 2024
- Coding Blocks: Data Science and ML Jul 2024
- SQL basic Certificate from Hacker Rank Oct 2023

## ACHIEVEMENTS

### Hack -AI:

Feb 2025

Participated in a Hackathon – Sustainable AI development

### Research Paper Publication:

Dec 2024

Accepted research paper titled "*Image Captioning using LSTM and CNN*".

### NCC Achievement:

Jul 2022

Successfully participated in NCC, demonstrating leadership, discipline, and teamwork, and secured a *B Grade*

## EDUCATION

### Lovely Professional University

Punjab, India

Bachelor of Technology - Computer Science and Engineering; **CGPA: 7.6**

Since Oct 2022

### MPRM Sri Viswasanti High School

Vijayawada, Andhra Pradesh

Intermediate; **Percentage: 92**

Apr 2019 - Mar 2021

### Dr. KKR Gowtham School High School

Rajahmundry, Andhra Pradesh

Matriculation; **Percentage: 95%**

Apr 2018 - Mar 2019