Snigdha Pandey

+91-7017389670 | snigdhapandey336@gmail.com | linkedin.com/in/snigdha-pandey-a56758228/ | github.com/snigdhap2301

EDUCATION

Vellore Institute of Technology, Bhopal **September 2021 – July 2025**
Pursuing a Bachelor of Technology in Computer Science and Engineering. - 8.37 CGPA *Bhopal, MP*

Shri Gulab Rai Montessori School **April 2020 - May 2021**
Class XII - 88.4% *Bareilly, UP*

Shri Gulab Rai Montessori School **April 2018 - May 2019**
Class X - 87% *Bareilly, UP*

TECHNICAL SKILLS

Python, Java, SQL, Google Cloud, JavaScript, HTML, CSS, Machine Learning, Git.

CERTIFICATES

- AWS Certified Cloud Practitioner, AWS — *March 2024*
- Google Cloud Certified Cloud Digital Leader — *January 2024*
- Google Cloud Career Practitioner — *January 2023*

PROJECTS

FLOORVERSE | *Python, Flask, Conditional VAE* ***August 2024 – April 2025***

- Developed an automated residential floorplan generation system using a Conditional Variational Autoencoder (CVAE) trained on 80,000+ images, reducing manual planning time by 60%.
- Architected a responsive Flask backend alongside adaptive frontend interface for real-time floorplan visualization based on user-defined parameters, resulting in a 40% reduction in floorplan revisions.
- Enhanced model performance by refining data normalization pipelines, improving data pre-processing workflows, and collaborating cross-functionally with peers to ensure architectural design and model predictions remained aligned with practical construction standards.

HushHate | *Python, TensorFlow, RNNs, LSTM* ***July 2024 – August 2024***

- Achieved more than 70% accuracy in detecting and classifying roast comments through the implementation of a sentiment analysis system using TensorFlow Keras and Recurrent Neural Networks (RNN) with Long Short-Term Memory (LSTM) layers.
- Enhanced the efficiency and accuracy of text processing by approximately 40% through strategic application of the NLTK library for preprocessing and normalization across 50+ collected roast and toast comment datasets.
- Defined, designed, and trained a Sequential deep learning model architecture comprising two LSTM layers, enabling context-aware sentiment classification while significantly optimizing model performance metrics.

Skin Cancer Prediction | *Python, Flask, CNNs, Keras* ***December 2023 – April 2024***

- Designed and created a deep learning-based Skin Cancer Prediction system utilizing Convolutional Neural Networks (CNNs) and TensorFlow Keras, achieving 97.56% validation accuracy on a curated dataset of over 10,000 labeled dermatoscopic images.
- Collaborated with a team of 9 contributors to design, develop, and deploy a Flask-based web application providing an intuitive user interface for image upload and result display, enhancing user accessibility and engagement.
- Executed comprehensive testing and iterative adjustments on deep learning frameworks, resulting in a 50% reduction in potential misdiagnosis rates.

ACHIEVEMENTS

- **Top Campaign Contributor**, Crowdsource by Google India, demonstrating active engagement and contributions to AI training data initiatives.
- **Presented research findings** at ICICCT, Jawaharlal Nehru University, contributing and showcasing technical research proficiency and academic excellence.

INTERESTS

Painting, Baking, Playing a Musical instrument