SUMMARY

As a Computer Science and Engineering student, I bring strong diligence, the ability to work both independently, and within a team and the capacity to communicate technical information to non-technical professionals and present complex information effectively. My personal projects have honed my skills in teamwork, communication, problem-solving and demonstration. I am excited to apply these strengths in a dynamic and innovative environment during the internship.

EDUCATION

Expected Graduation: May, 2026

- *Bachelor's in Computer Science and Engineering* **(Penultimate Year)**
- *Relevant Courses:* Software Engineering, Data Structure, Algorithm, Probability and Statistics, Linear Algebra, Calculus, Computer Graphics, Object Oriented Programming

TECHNICAL SKILLS

- *Computer Languages:* Python, SQL, C++, and Java.
- *Tools:* TensorFlow, Scikit-learn, NumPy, SciPy, Pandas, Seaborn, Apache Spark, Matplotlib, PyTorch, OpenCV, Gymnasium, Keras-RL2, Git, GitHub, and Power BI.
- *Data Science Skills:* Data Science Pipeline (Collection, Cleaning, Analysis, Mining, Warehousing, Modeling, Visualization), Machine Learning, Deep Learning, Reinforcement Learning, Prompt Engineering.
- *Operating Systems:* Windows, and Debian-based Linux distributions.
- *Cloud and Virtualization:* Google Cloud, AWS, Docker.

PROJECTS EXPERIENCE

Independent Technical Project Name, *MoodVision*

- Developed a system to analyze facial expressions, age and gender using CNN Classifier with ResNet layer.
- Utilized multi-task learning to simultaneously predict multiple outputs.
- Achieved 54% accuracy in emotion detection, 85% in gender classification, and 65% in age estimation.
- Plotted Histograms and Pie Charts to get a deeper understanding of the dataset.
- Visualized the classification performance using confusion matrix as well as measured the precision score, recall score and F1 score which helped with increasing facial recognition accuracy around 7%.

Independent Technical Project Name, *Sign2Text*

- Created a system to translate American Sign Language into text using CNN Classifier with a classification accuracy of 94%.
- Created bar charts to visualize the dataset and display the number of samples for each label.
- Measured precision score, recall score and F1 score to get a better measurement of the performance of the model and eventually improved the accuracy of the model by 3%.

Independent Technical Project Name, *Buzzoff*

- Developed a deep learning neural network that can identify six different mosquito species.
- Utilized CNN Classifier with ResNet layer to achieve an accuracy of about 81%.
- Visualized one image from each label, as well as bar charts and pie charts to have a deeper understanding of the dataset.
- Plotted confusion matrix and recall-precision curve, and calculated precision, recall and F1 scores to visualize the performance of the model and helping in increasing the accuracy of the model by 12%.

Independent Technical Project Name, *EcoForecaster*

- Predicted air quality indices (MSE: 0.12) using Random Forest, analyzed seasonal trends with time-series methods, and visualized pollutant levels through heatmaps and trend graphs.