To run these three models, an user has to install the modules below.

1. **TensorFlow**: This is the primary framework for defining, training, and evaluating neural networks.

   pip install tensorflow

2. **NumPy**: Used for numerical operations on arrays, which is essential for handling data preprocessing and transformations.

   pip install numpy

3. **Matplotlib**: A plotting library used for creating visualizations such as graphs and charts to analyze the model's training and validation results.

   pip install matplotlib

4. **Seaborn**: Built on top of Matplotlib, it provides a high-level interface for drawing attractive and informative statistical graphics, such as the confusion matrix heatmap.

   pip install seaborn

5. **Scikit-learn**: Although not used for model training, it's required for generating confusion matrices and potentially other evaluation metrics.

   pip install scikit-learn

6. **Pandas** (optional): While not explicitly used in your code, Pandas can be very helpful for data manipulation and analysis, especially if you're dealing with more complex data operations.

   pip install pandas

Additional Setup:

- **Python Version**: Ensure you are using a Python version compatible with all these libraries, typically Python 3.6-3.9.
- **CUDA and cuDNN**: If you're planning on running these models using NVIDIA GPUs for faster computation, ensure that your setup includes CUDA and cuDNN, which are necessary for TensorFlow to utilize GPU acceleration. This involves more detailed system setup steps, including installing the correct versions of CUDA and cuDNN compatible with the TensorFlow version you are using.

Installation Commands:

You can install all the required packages at once using pip in your Python environment. Here is a combined command:

pip install tensorflow numpy matplotlib seaborn scikit-learn pandas