Project Guide (HW3)

1 Files and Their Functions

- **cnn_classifier.py**: Implementation of the convolutional neural network models.
- **core50.py**: Handles dataset loading and preprocessing for the Core50 dataset.
- **exp.txt, exp_deep.txt, net_deep.txt, net_shallow.txt, oscer.txt**: Configuration files for experiment setups and model parameters.
- **Figure_4&5.py**: Script for generating visualization figures related to test set images and confusion matrices.
- **hw3.sh, hw3_deep.sh**: Batch scripts for job submission in a computing cluster.
- **hw3_base.py**: Main script for setting up and executing machine learning experiments.
- **hw3_parser.py**: Parses command line arguments for scripts.
- **HW3_Report.pdf**: Summary report of results and insights from the homework.
- **job_control.py**: Manages job submissions and possibly monitoring.
- **plotter.py**: Contains functions for plotting various graphs and charts.
- **symbiotic_metrics.py**: Contains custom metrics or functionalities for model evaluation.
- **hw3_0004_stdout.txt, hw3_18033549_stdout.txt**: Output files from the batch jobs, containing execution logs or results.

2 Conclusion

The files in this submission comprehensively cover all stages of the project from data handling, through model definition and experimentation, to result visualization and evaluation. This modular structure facilitates systematic experimentation and comprehensive analysis.