Date : 31 March-5 April 2025

Work Done This Week

Model Exploration & Setup

Analyzed MMRotate project structure.

Documented folder usage (configs/, models/, evaluation.py, etc.)

Outlined the pipeline starting from run\_experiment.py.

Environment Setup

Created a Conda environment (mmrotate\_env) with Python 3.8.

Installed Visual C++ Build Tools for compiling C++/CUDA dependencies.

Attempted to install mmcv-full, mmdet, and their dependencies.

Downloaded and linked necessary SDKs and build tools.

Error Handling

Investigated and resolved issues with cl.exe not being detected.

Set environment variables like DISTUTILS\_USE\_SDK=1.

Addressed recurring wheel build failures related to missing system-level configurations.

Planned Work for Next Week

Clean Installation in a Compatible Environment

Set up a clean Linux-based environment with required toolchains.

Successfully install mmcv-full, mmdet, and mmrotate.

Run Initial Model Tests

Load a pre-trained model and perform inference on test images.

Test and validate the run\_experiment.py pipeline.

Dataset Preparation

Organize the DOTA dataset for experiments.

Verify label formats and readiness for evaluation.