Assignment 7.5 — Video Presentation: Explaining Your End-to-End Ensemble Project

**Overview**

For this final reflection assignment, you will create a 10-minute recorded video presentation explaining your completed Assignment 7.1 pipeline project. The goal is to demonstrate not just that your pipeline works, but that you understand the design choices, workflow, and ethical considerations behind it. This is your chance to present your project as if to colleagues, stakeholders, or a technical audience.

**Learning goals**

* Practice communicating complex ML workflows clearly and professionally.
* Show that you understand how each stage of the pipeline contributes to the final system.
* Articulate the importance of reproducibility, licensing, and confidence signals.

**Requirements**

**Length & Format**

* ~10 minutes (±1 minute).
* Video format: MP4 or YouTube unlisted link.
* Submit along with any slide deck or visual aids used.

**Content to Cover**

1. **Project Introduction**
   * Your chosen dataset (source, license, citation).
   * Overall project goal.
2. **Base Models**
   * Explain the eight lookback windows (365, 270, 180, 90, 60, 30, 14, 1 days).
   * Describe how you trained and structured these models.
   * Mention the 1D BiGRU constraint and regularization.
3. **Meta-Model**
   * Show how you ensembled the base model predictions.
   * Explain your choice of regression (e.g., Ridge).
4. **Exogenous Confidence API**
   * Describe the provider interface.
   * Summarize how exogenous signals were integrated and normalized.
   * Share an example of how the confidence label influenced your predictions.
5. **Final Outputs**
   * Demonstrate the prediction + confidence summary.
   * Show how logs and artifacts are saved and versioned.
6. **Reflection**
   * What worked well?
   * What challenges did you face?
   * How would you improve this pipeline?

**Deliverables**

* **Video file** (~10 min, MP4) or a secure unlisted link.
* Optional: supporting slides (PDF or PowerPoint).
* Short note (text or doc) with your video link and any additional context.

**Grading rubric (100 pts)**

| **Criterion** | **Pts** | **Description** |
| --- | --- | --- |
| **Clarity & Structure** | 30 | Presentation flows logically, clear explanations of all steps. |
| **Technical Accuracy** | 25 | Correctly describes base models, meta-model, and exogenous API. |
| **Depth of Understanding** | 20 | Shows strong grasp of reproducibility, licensing, and design choices. |
| **Delivery & Communication** | 15 | Engaging, professional tone, within time limits. |
| **Reflection** | 10 | Honest, thoughtful discussion of challenges and improvements. |