yologoldinstructions

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1 Using YOLOv8 to Recognize Images of Gold

YOLOv8 can be used to detect gold in images or video feeds. A key step toward building an automated, ML-driven metal detector for gold discovery. ## Code can be found here: https://github.com/smorganstern/Quest-for-Golden-Treasures/releases

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1.1 Setup Instructions (Windows)

1.1.1 1. Open Anaconda Command Prompt

Launch the **Anaconda Prompt** from the Start menu.

1.1.2 2. Check for Existing Environments

"'bash conda info --envs

1.1.3 3. Create a New Environment

conda create -n ai python=3.10 -y

1.1.4 4. Activate the Environment

conda activate ai

1.1.5 5. Install Required Packages

pip install ultralytics pip install opencv-python pip install pandas matplotlib

1.1.6 5. Verify YOLOv8 Installation

yolo version

1.1.7 6. Train or Run the Model

yolo task=detect mode=predict model=goldlabels.pt source="gold.mp4"

1.1.8 Optional GPU acceleration

Install the latest NVIDIA GPU drivers. Install the CUDA Toolkit (matching the GPU and PyTorch requirements).