## Configuration

YOLOv8 Model Path ?

> best.pt

Detection Confidence

0.40

Target Label to Find ?

> STR

## Debug Options

☑ Show All Detected Text ?

# 🏠 Floor Plan Analysis System with PaddleOCR

Upload a floor plan image and analyze architectural elements

## Upload Floor Plan

Choose a floor plan image

| ☁ Drag and drop file here | Browse files |
| Limit 200MB per file • PNG, JPG, JPEG, BMP, TIFF, TIF | |

📄 floor_paln3.png  68.7KB  ✕

## Original Image

> The `use_column_width` parameter has been deprecated and will be removed in a future release. Please utilize the `use_container_width` parameter instead.

## Analysis Results

🚪 Door Symbols Found

6

📝 'STR' Labels Found

0

## Annotated Image

> The `use_column_width` parameter has been deprecated and will be removed in a future release. Please utilize the `use_container_width` parameter instead.

🔍 Analyze Floor Plan

Analysis completed!

⌄  ℹ️ How to Use
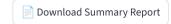
# Instructions:

1. **Install Dependencies:**

```
# For CPU version (recommended for most users)
pip install paddlepaddle paddleocr ultralytics streamlit opencv-python pillow pandas matplotlib numpy

# Or for GPU version (if you have CUDA)
pip install paddlepaddle-gpu paddleocr ultralytics streamlit opencv-python pillow pandas matplotlib numpy
```

2. **Troubleshooting PaddleOCR**:

   - If you get "Unknown argument" errors, update PaddleOCR: `pip install --upgrade paddleocr`

   - If installation fails, try: `pip install paddlepaddle==2.4.2 paddleocr==2.6.1.3`

   - For M1/M2 Macs: Use `pip install paddlepaddle` (CPU version only)

3. **Model Setup**: Ensure your trained YOLOv8 model file is accessible and enter the correct path

4. **Upload Image**: Choose a floor plan image in supported formats (PNG, JPG, etc.)

5. **Set Parameters**:

   - Adjust detection confidence threshold (0.1-1.0)

   - Enter the target label you want to find (e.g., "STR", "BR", "LR")

   - Enable "Show All Detected Text" for debugging

6. **Analyze**: Click the "Analyze Floor Plan" button to start processing

7. **Review Results**:

   - View metrics for door symbols and target labels found

   - Examine the annotated image with highlighted detections

   - Download detailed reports and annotated images

## Color Coding:

- 🔴 **Red boxes**: Target text labels (e.g., "STR") with original text and confidence
- 🔵 **Blue boxes**: Door symbols detected by YOLO
- 🟢 **Light Green boxes**: All detected text (debug mode)

## Improvements in this version:

- **PaddleOCR Integration**: More accurate text detection

- **Image Preprocessing**: Enhanced contrast and noise reduction

- **Better Text Matching**: Fuzzy matching for OCR errors

- **Improved Visualization**: Text labels show original text and confidence

- **Debug Mode**: Option to see all detected text

- **Duplicate Removal**: Prevents duplicate text detections

Red boxes: Target labels, Blue boxes: Door symbols, Green boxes: All text (if

> 📊 Detailed Results

📥 **Download Results**

📄 Download Summary Report      🖼️ Download Annotated Image