

Streamlit App for ICP Waveform Detection - Setup Guide

This guide will help you run your Streamlit app using app.py and best.pt on your laptop.

1. Install Python (if not already installed)

- Recommended version: Python 3.9 - 3.11
- Download from: <https://www.python.org/downloads/>

2. Create and Activate a Virtual Environment (optional but recommended)

Navigate to your project folder:

```
cd path\to\your\project-folder
```

Create virtual environment:

```
python -m venv venv
```

Activate it:

```
venv\Scripts\activate (on Windows)
```

3. Install Required Packages

Run the following:

```
pip install streamlit torch torchvision torchaudio --index-url https://download.pytorch.org/whl/cpu  
pip install opencv-python pillow numpy
```

If using cloned YOLOv5 repo:

```
pip install -r yolov5/requirements.txt
```

4. Ensure Files Are in Place

In your folder:

- app.py <- Streamlit script
- best.pt <- YOLOv5 model

5. Optional: Fix PosixPath Error on Windows

Add this to the top of app.py:

```
import pathlib  
  
from pathlib import WindowsPath  
  
pathlib.PosixPath = WindowsPath
```

6. Run the Streamlit App

From terminal:

```
streamlit run app.py
```

7. Access the App

Once launched, go to:

```
http://localhost:8501
```

Your app will open in the browser automatically if not blocked by firewall.