

Drone Edge Processing Project

Setup

1. Clone the repository:

```
git clone https://github.com/<your_username>/Drone-Project.git
cd Drone-Project
```

2. Create and activate a virtual environment:

```
python3 -m venv venv
source venv/bin/activate
pip install --upgrade pip
pip install -r requirements.txt
```

3. Install Tkinter for GUI (optional):

macOS (Python.org installer included): no extra steps

macOS (Homebrew + MacPorts):

```
brew install tcl-tk
sudo port install python39 +tkinter
```

Linux (Debian/Ubuntu):

```
sudo apt install python3-tk
```

Running the Application

1. Central Server + Dashboard:

```
source venv/bin/activate
python -m src.central_server.tcp_receiver --config config/server_config.yaml
```

2. Drone TCP Server:

```
source venv/bin/activate
python -m src.drone.tcp_server --config config/drone_config.yaml
```

3. Sensor Node Instances (e.g., 3 sensors):