

# INSTRUCTIONS

## Prerequisites:

1. Android Studio installed in laptop
2. Mission Planner software installed in laptop
3. EMILY is ready
4. Create ad-hoc network in laptop running Mission Planner( we are using a third -party software for creating ad-hoc network. [Simple ad hoc creator](#) ) or Use android Tethering & portable hotspot and connect the laptop with mission planner to that hotspot.

## Main procedures:

1. Open Mission Planner to create autonomous plan (using waypoints) or manual plan for EMILY
2. Run EMILY on the lake (Using Log files can simulate the actual emily behavior)
3. There is a python script in source code (python\_server.py) that creates server in the laptop running Mission Planner. This python script will continuously retrieve data from Mission Planner and push data to our application through ad-hoc network

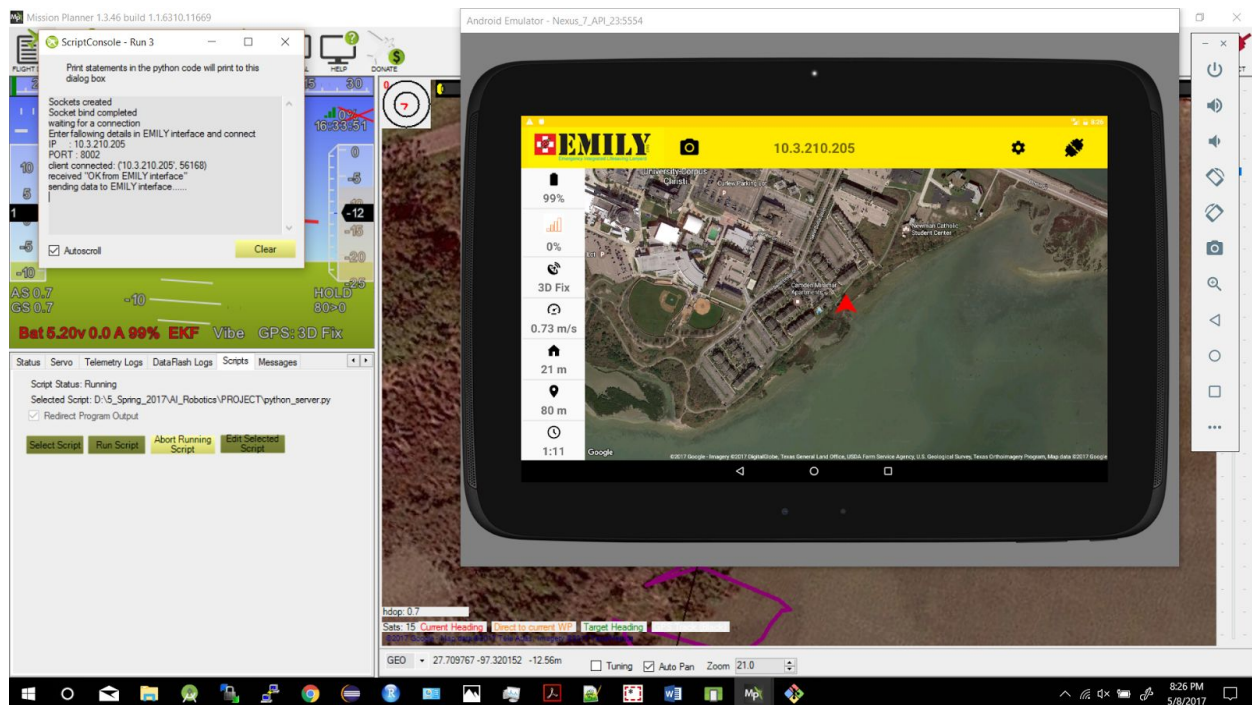


Figure: Running python script in mission planner

4. On the other hand, running Android Studio on other laptop(for better performance )
  - Run the Android studio
  - Configure the emulator that we will use to run our application  
Note: Choose emulator type is tablet with size: 10 inches(2560 x 1600 resolution)
  - Download our source code from github link (we attach the source code as well):  
<https://github.com/vpinnaka/COS-635-AI-Robotics-Project>

- Run the project by Android Studio and using emulator tablet configured like above
- Connect 2 laptops together through ad-hoc networks (one laptop running Mission Planner, one laptop running android studio)
- When our application successfully run in the emulator, we click on “Connect button” on our interface and type in the IP address that Mission Planner provides (when we run python script on Mission Planner, it will provide a IP address)
- If a 10 inch android tablet is available you can avoid the hassle of testing application in two laptops.