Computer Control Modules

Core Rover Software

main.py
- module descriptions and interface
- start processes and theads

<<DATA>>
StateManager.py
- maintain software state memory
- data reirection

<<MODULE>>
ProtocolBufferServer.py
- Serialization and Deserialization of data
- Logging and connection to base client

Rover Control

<<MODULE>>
DriveProcess
- Wheel Speed Requests
- Polling Drive Data
- Heat and Health Control/Requests

<<MODULE>>
BatteryProcess
- Power Data Monitoring
- Access to any editable parameters

<<MODULE>>
ArmProcess
- Arm Position Requests
- Path Calculations (?)
- Polling Data for Arm Visualization

<<MODULE>>
CameraProcess
- Control of active camera module if possible...
- Pan and Tilt requests

<<MODULE>>
ExperimentProcess
- Drill Control Requests
- Bluetooth data monitoring (serial)

<<MODULE>>
NavigationProcess
- GPS Control
- Compas calculations
- Auto Navigation Commands

PackageName

<<MODULE>>
WebserverProcess
- Display of Data to User via Bottle
- Control information to other Modules

<<SUB-MODULE>>
WebserverInput
- Input from Joysticks
- Other input???

<<SUB-MODULE>>
WeberverResources
- Pictures and Images for Bottle
- CSS and other Formatting