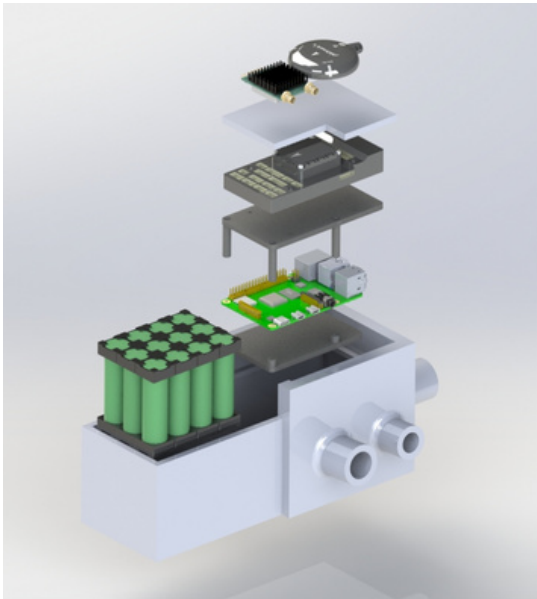
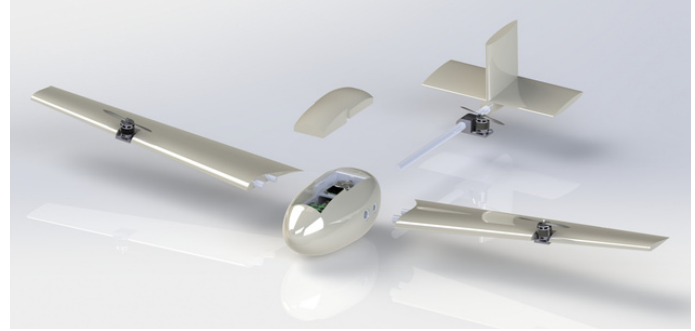
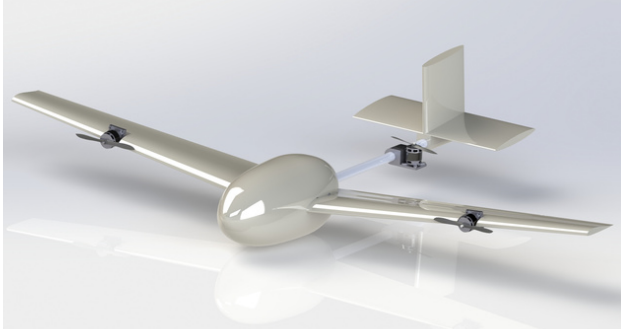




EARLY WILDFIRE DETECTION UAV



What?

- Currently designing a VTOL UAV equipped with IR thermal camera capable of early wildfire detection
- Early prototyping stage

How?

- Used SolidWorks to design general concept assembly
- Coded Raspberry Pi with Python to interpret IR sensor data
- Fully autonomously controlled by PixHawk FC using ArduPilot
- Communication of flight path and temperature data with ground station through MAVLINK
- Custom soldered battery

CINEMATIC FPV DRONES



What?

- Designed, soldered and assembled three separate FPV drones with cinematic purposes

How?

- Thorough selection of electrical components (motors, ESCs, PDBs, BECs, FC, Video TX, Radio RX, etc.)
- Tin soldered every component together
- Assembled everything into carbon fibre chassis

Results

- Three fully functional drones with great cinematic characteristics for creative and otherwise impossible shots
- Demo: <https://www.youtube.com/watch?v=j5z-rMG1XpI>

ESC PCB DESIGN

What?

- Currently working on the design of a BLDC motor sensorless ESC
- KiCAD PCB design experience
- Design stage

