

Air Duct Inspection (Mayfly) and Leak Sealing (Aardvark)

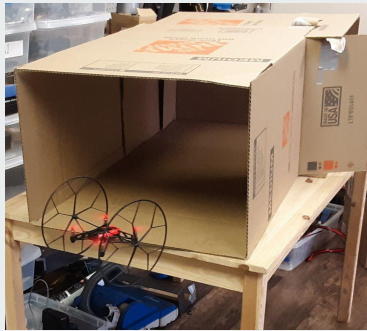
Problem: Air duct leak is responsible for **20% energy bill** of all facilities and hazardous indoor air quality.*

Current Solution: **Manual inspection** and **Intrusive leak sealing process.**

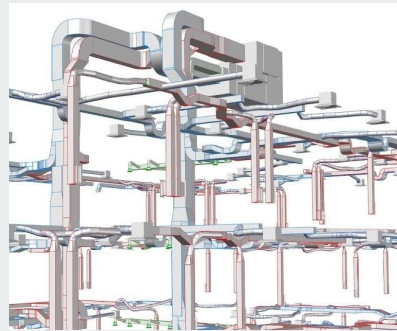
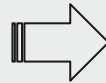
Block all HVAC vents, and fill the entire air duct system with sealant for 2 hours (residential house). For large commercial building, the process depends on the size of the air duct system.

Our Solution: **Automated inspection** and **remote leak sealing process.**

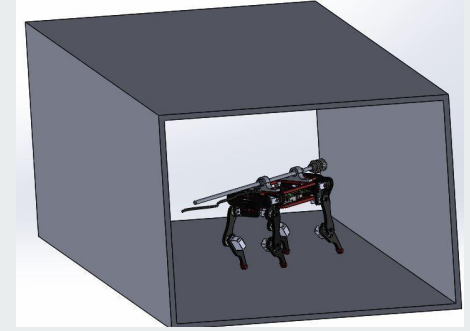
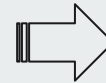
Leverage industry standard current solution and automate the process with minimal invasion of the air duct system



Mayfly (Inspection)



Air Duct Layout



Aardvark (Sealing)

Partner/Team: Friendly Robots consists of engineers co-founders of different discipline (ME, EE/CS, DS) and business co-founders who owned and operated air duct cleaning service. We also have vast connections with facility management companies through our first product.

* https://www.energystar.gov/campaign/heating_cooling/duct_sealing/benefits

The New York Times

Home Efficiency Opportunities

A recent study by McKinsey & Company showed the potential for major energy savings in the United States from relatively simple home improvements. The required investment in these improvements would be paid for by the savings over their lifetime.

TYPE OF IMPROVEMENT <i>In existing homes</i>	POTENTIAL ENERGY SAVINGS <i>In trillions of B.T.U.'s</i>	COST <i>Per million B.T.U.'s</i>
Seal ducts	510	\$ 4.90
Insulate basement	290	4.70
Install programmable thermostat	230	4.20
Insulate attic	180	5.50
Upgrade heating equipment*	160	11.40

