

DUCTINEL: A ROBOTIC SMART GRID DUCT SENTINEL

Proposed solution

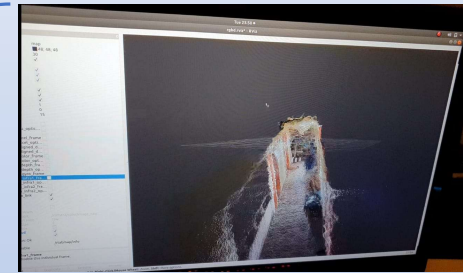
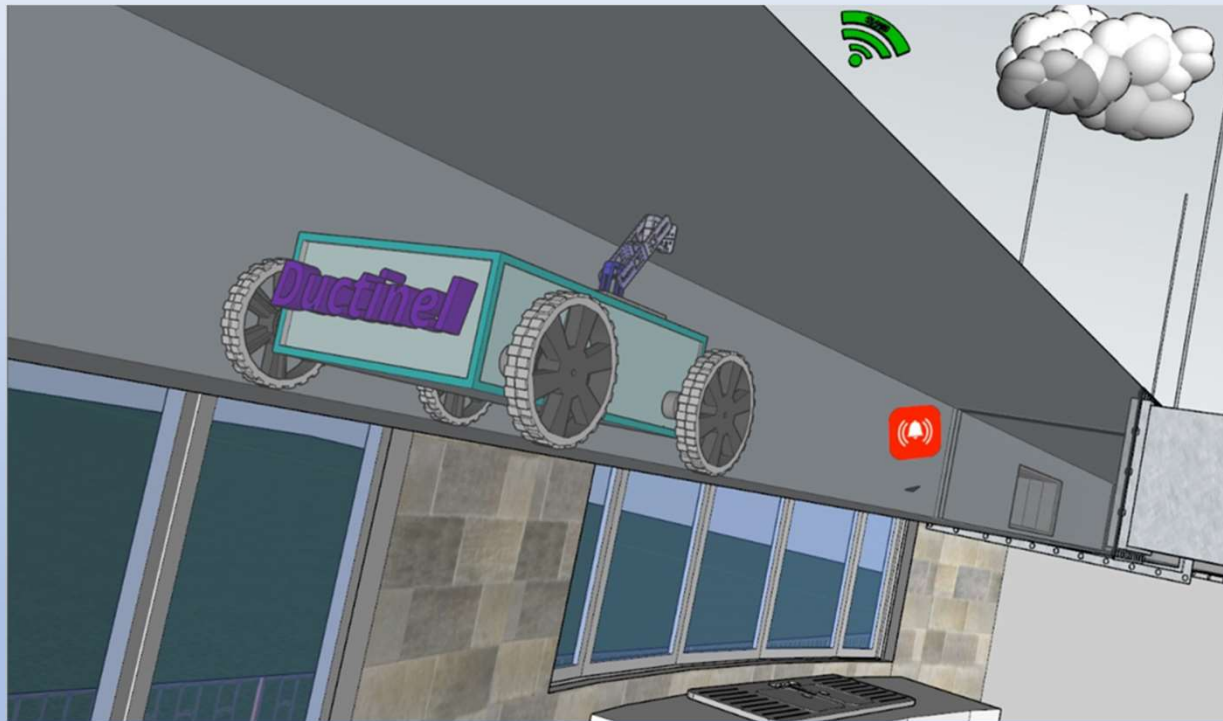
An autonomous robot that seals the joints of new pipelines but internally, inspects the health of the pipeline over time, cleans, maintains and repairs cracks, as well as responds and reports remotely (cloud) to alarm events when behavioral changes are detected abnormal from the HVAC system to preserve it for longer years.

Need Section

Decrease energy cost during and after the installation of HVAC duct systems.

Challenge Section

Centralized HVACs consume more energy than necessary because they distribute constant air to all zones but have no control over the grille outlets.



Partnering / Team

For more than 11 years, our team has had a long experience in smart building automation. Last years in building robots for multiple uses, as well as artificial intelligence, HVAC, energy, networks and more, showing their solutions worldwide to entities as important such as the army, the European Space Agency, multinational companies and several others.