Program Name / Project Descriptions

**Project 1: Mini-splits**
During the first part of my internship, I learned how to install mini-split systems. We installed 35 mini-split units. To do this, we would run the refrigerant lines, drain hose, and electrical line through a set of drilled holes leading to the outside condenser.

![Image of mini-split system](image1.png)

**Project 2: New Evaporator Coils**
The second phase of my internship focused on how to replace evaporator coils. I removed an old coil system in a residence crawl space. In the pictures below, the evaporator coil has been removed and all you see is the furnace.

![Image of removed evaporator coil](image2.png)

Achievements / Results / Outcomes

**Project 1: Mini-Splits**
Installed mini-split systems in a hotel. The system was ductless, so we connected the suction and liquid line to the outside condenser. We also connected the drain hose from the indoor coil and wired the system’s circuits.

**Project 2: New Evaporator Coils**
We removed the coil and installed a new one at a residence. We also removed the duct installed to the coil. There was a gas pipe line that we had ran directly in front of the new coil. Then, we reinstalled the duct systems into the new coil unit and attached the new coil to the furnace. We performed a static pressure test after the install to make sure there is maximum and efficient air flow.

![Image of new evaporator coil](image3.png)

Lessons Learned / Intern Experience

**Overview of lessons learned...**

**Successful Strategies:**
1. Wiring a mini split circuitry.
2. Use a torque wrench.
3. Leveling the indoor coil.

**Recommendations for Improvement / Program Expansion:**
1. More hands on training with tools
2. More hands on training in class
3. More shop work

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Acknowledgements:
Patrick and Jerry from Right Away A/C