# Trends. Awareness. Guidance.

Insights for sustainable success in the mechanical services industry



# How AI is Enhancing the Work of HVAC Technicians

From remote diagnostics to predictive maintenance, artificial intelligence is transforming the HVAC industry.

The rise of artificial intelligence (AI) doesn't have to mean job displacement for skilled trade workers. Instead, it can be an opportunity to use technology to better inform human work. In the heating, ventilation, and air conditioning (HVAC) industry specifically, AI can be used in a variety of ways to make technicians' jobs easier. Find out how below.



# Three Ways AI Can Help HVAC Technicians Work More Efficiently

HVAC workers can use AI to power faster problem-solving. Learn about the different ways emerging tech can be adapted for the HVAC industry.

#### Remote Diagnostics

Using AI tools, technicians can discover what's wrong before heading to a site. Data collected from smart thermostats and other connected devices can tell repair workers everything they need to know from afar. Techs can use this information to prioritize emergencies over less urgent projects, as well as troubleshoot smaller issues over the phone, saving time and money.

#### **Predictive Maintenance**

Sensors in heating and cooling systems give off an overflow of data that is difficult to parse through. All algorithms can analyze vast amounts of data to find patterns faster, alerting technicians to potential issues before they worsen. Using All for predictive maintenance, HVAC workers can prevent serious breakdowns before they turn into costly repairs.

An attitude of ongoing education and exploration will serve HVAC technicians well as they learn new skills, work with technology, and pivot their workflows.

#### **Augmented Reality**

As tech companies continue to reach breakthroughs in augmented reality (AR) electronics, the HVAC industry is headed toward using AR to better inform technicians. In the future, an HVAC worker could see overlaid schematics and real-time data from your ductwork through AR glasses, giving them a better look that leads to more efficient and accurate repairs.



## Preparing for Challenges With AI in the HVAC Industry

As emerging technologies take hold in the HVAC industry, technicians will have to learn new skills and adapt to potential challenges.

#### Avoiding Job Displacement by Building Transferable Skills

Widespread job displacement is highly unlikely, especially in skilled trades that require contextual problem-solving and a dexterous human touch. However, entry-level positions or roles focused on repetitive tasks may be affected. Working on soft skills like critical thinking, communication, and customer service can give workers an edge as Al takes over routine tasks.

#### Creating a Lifelong Learning Mindset With Continuous Training

While job elimination is less likely, job transformation will be vital as trade industries embrace Al. An attitude of ongoing education and exploration will serve HVAC technicians well as they learn new skills, work with technology, and pivot their workflows.

### The Arcticom Group Prepares People for Machine Collaboration

As HVAC engineers and technicians incorporate new tools into their work, The Arcticom Group (TAG) is their partner for intuitive training. We're known for being ahead of the curve with new equipment and techniques, empowering our network of skilled HVACR workers to solve businesses' problems as efficiently and accurately as possible.

Whether you're a small family-run business, a corporate powerhouse, or anywhere in between, contact us for industry-leading support with your HVACR systems. If you're interested in working with us as an HVACR professional, see our <u>current job openings</u>.



Adam Knutz President, US Refrigeration



1-833-824-8722 THEARCTICOMGROUP.COM