

# SMART ENERGY

## GEOPRIVACY VIDEO SERIES

[HTTPS://VIMEO.COM/469620031](https://vimeo.com/469620031)

### SUMMARY

A woman gets up in the morning and chats with her partner over coffee, adjusting the smart thermostat in her home and observing the settings on her phone. She leaves for work and turns down the thermostat. Employees at a utility company observe on a map the locations of homes with the heat turned down during the day. A burglar targets the empty house where it is known the heat is off, suggesting that no one is home. Additional video is shown of others adjusting their smart thermostats for the day.

### ACTIVITIES

Take a poll about the connected devices in students' homes. Do students have smart thermometers? Doorbell cameras? Connected refrigerators? Speakers? Cars? Locks? Have they ever experienced suspicious activity with these devices?

Have students make a list of vulnerabilities with smart devices. How else (besides burglary) might a hacker or other observer of connected data impact residents of the home without proper security?

### RELEVANT ARTICLES

How Nest, Designed to Keep Intruders Out of People's Homes, Effectively Allowed Hackers to Get In. Albergotti, R. 2019. The Washington Post. <https://www.washingtonpost.com/technology/2019/04/23/how-nest-designed-keep-intruders-out-peoples-homes-effectively-allowed-hackers-get/>

Change This One Setting to Stop Hackers from Taking Over Your Smart Home Devices. Gelinas, J. Kim Komando. <https://www.komando.com/security-privacy/change-this-one-setting-to-stop-hackers-from-taking-over-your-smart-home-devices/600227/>

Closing the Blinds: Four Strategies for Protecting Smart Home Privacy from Network Observers. Apthorpe, N., Reisman, D., and Feamster, N. 2017. ARXIV. <https://arxiv.org/pdf/1705.06809.pdf>

### DISCUSSION POINTS

- Have you heard of two-factor authentication? Do you use it for any of your logins?
- A smart thermostat can save energy by automatically turning down the heat when you might otherwise forget. Does the energy efficiency and ease of a smart thermostat override any privacy concerns?
- How might advertisers benefit from access to your smart thermostat data?