

Researchers find ways of securing 'internet of things' security problems in the smart home

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So...you've built your smart home, it's got smart heating and lighting, all the latest smart communications and entertainment systems, and of

course, smart power generation to make it smart and green. But, how do you keep it secure and stop forced digital or physical entry? Well, you need smart security too, of course.

Writing in the *International Journal of Intelligent Information and Database Systems*, a team from India discusses how the sensor-enabled [internet of things](#) (IoT) has improved many aspects of daily life and how the same tools and devices might be used to make us safer and more secure too.

Nishtha Kesswani of the Department of Computer Science at the Central University of Rajasthan, in BandarSindri, Ajmer and Basant Agarwal of the Department of Computer Science & Engineering, at the Indian Institute of Information Technology Kota (IIIT Kota), MNIT Campus, in Jaipur, describe their approach to digital security for the [smart home](#).

"We present an intrusion detection system, SmartGuard that can be deployed in the smart home," they write. "The system would be able to detect malicious behavior within the [home] network as well as any malicious communications from outside." Obviously, a hacker who can break into a smart home's network would easily be able to override [security features](#), such as lights and electronic locking systems.

"In order to reduce the overhead on the energy-constrained IoT devices, a cluster-based approach has been used," the team explains. "The proposed approach will be a smart choice in today's smart homes full of vulnerabilities," the team concludes.

More information: Nishtha Kesswani et al. SmartGuard: an IoT-based intrusion detection system for smart homes, *International Journal of Intelligent Information and Database Systems* (2020). [DOI: 10.1504/IJIIDS.2020.108218](#)

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