Cooking Raspberry Pi for the smart home

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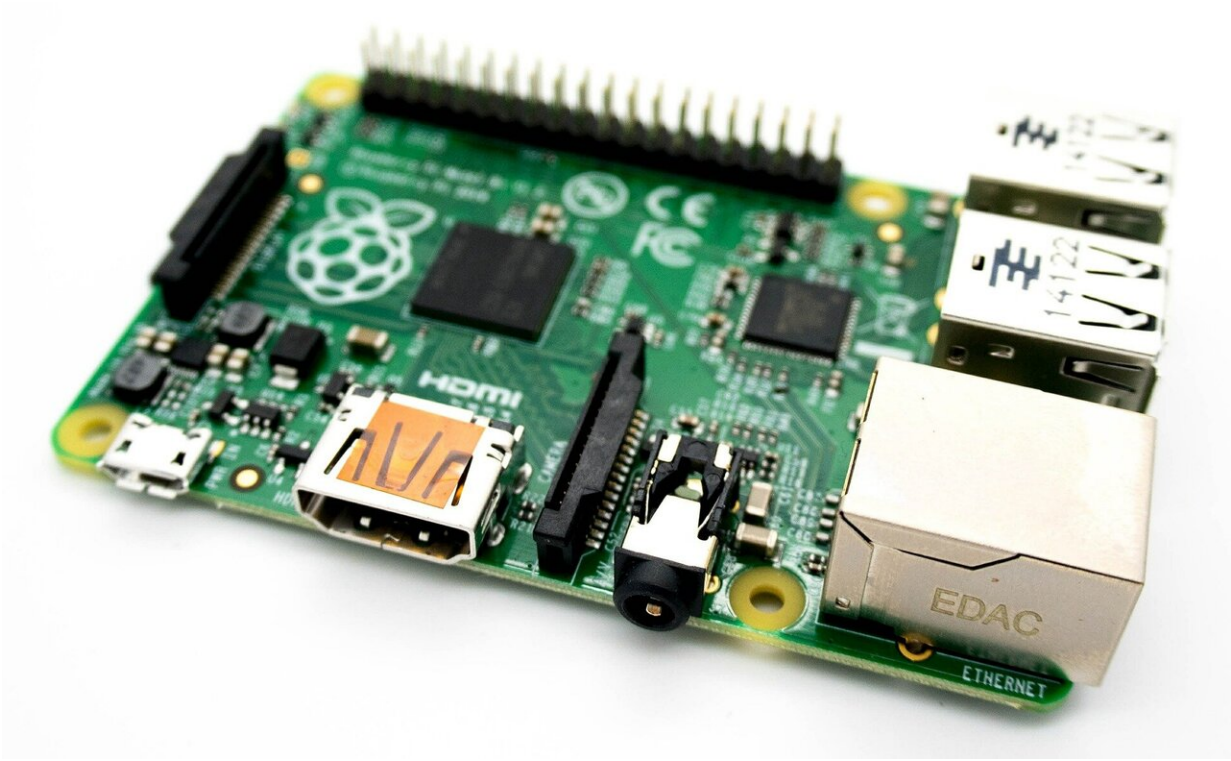

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Researchers in India describe the potential of the low-cost Raspberry Pi computer to be used as a control system for home automation using the so-called Internet of Things. They outline details in the *International Journal of Advanced Intelligence Paradigms*.

Vikash Yadav of the Department of Computer Science and Engineering

at the ABES Engineering College, in Ghaziabad, Deepak Kumar Mishra, Prathmesh Singh, and Priytosh Kumar Tripathi of the Department of Computer Science and Engineering, at the GL Bajaj Institute of Technology and Management, in Greater Noida, demonstrate specifically how a Raspberry Pi Zero W can be used to connect net-enabled domestic appliances and other smart electronic devices in the home or even the workplace so that they can be monitored and controlled from a location anywhere in the world with internet access.

Home automation systems seek to improve our quality of life and remove the need for human intervention in many menial everyday tasks. Sensors, actuators, controllers, and devices exist that one might refer to as "smart" or "internet-enabled," these are commonly referred to as the Internet of Things, the IoT, and an inexpensive and versatile computer also connected to the internet can be used to monitor and control them all, acting as a connection point within the home for the user to access from outside. The team's approach, they report, offers a reliable, scalable and highly cost-efficient way to enable home automation. Moreover, the same approach might be used to automate equipment, heating, lighting and other systems in the home and in the workplace.

More information: Vikash Yadav et al. Home automation system using Raspberry Pi Zero W, *International Journal of Advanced Intelligence Paradigms* (2020). DOI: 10.1504/IJAIP.2020.107023

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