

## Development of smart house model to control lighting, temperature, and gas leakage detection system

### ABSTRACT

Smart houses one of Internet of things application. It is difficult to manage the energy loss due to inefficient control of electrical devices running inside the houses. Also fire due to gas leaking could cause a huge damage in the house. This paper is evaluating people awareness about smart houses in Kuala Lumpur and Sydney, and to propose a system to control light, temperature and to detect gas leaking. LabVIEW used to design lighting, temperature and gas leakage detection system. Arduino used to interface between software system and sensors and actuators of hardware system. The result showed that 88.7% and 90.2 % of people in Kuala Lumpur and Sydney respectively heard about smart houses, the offered system is able to control lighting and monitor house environment for humidity, temperature and gas leaking. In conclusion, the smart house model is potential to reduce the losses in the energy, and decrease the danger of fire disasters. Keywords - Smart houses; LabVIEW; Arduino ONU, sensors.

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