## **Robot Design and Science Education**

Hidenori Ishihara, Ph.D. Associate Professor, Faculty of Engineering and Design, Kagawa University E-mail: ishihara.hidenori@kagawa-u.ac.jp



## **ROBOT DESIGN**

Robot is constructed by combination of controllers, actuators and sensors. We have tried to evolve the robot technologies by approaching of mechanical design.



Locomotion Switching Robot can move by switching the locomotion mode: 4-legged walking or wheel driving

We presented "Udon Master Robot" in Setouch Triennale 2019 as the compilation of our investigation. He served Sanuki-Udon for over 2500 participants in this event



Six-Legged Robot for Heavy Transportation is standing by 6 jacked legs. The designed jacked leg realizes to lift up the heavy load.



Wall Climbing robot by Magnet Adhesion can move on the vertical wall by adsorbing on the steel wall





## EDUCATION OF SCIENCE AND TECHNOLOGY

We established Kagawa Gennai Network in 2011. Kagawa Gennai Network has promoting the various activities and events of science and technology in Kagawa Prefecture.



Science and Technology Schools have promoted in Kagawa Prefecture



Summer Camp "Challenge to Robot Champion"

