Intelligent robots and systems

Keyword: modeling, dynamics analysis, system integration

Shunsuke Komizunai, Ph. D.

Associate Professor, Faculty of Engineering and Design, Kagawa University **E-mail**: komizunai.shunsuke@kagawa-u.ac.jp Lab. URL: <u>https://www.eng.kagawa-u.ac.jp/~komizunai/</u>

Research topics:

Motion control od robots

Technologies to enable robots to operate successfully in work sites, disaster areas and natural terrain are being studied. Modeling of dynamic relationship between robots and loose soil, improvement of simulators, and development of walking stabilization control systems using a humanoid robot are being conducted.

Tangible infosphere

As one of the implementations to extend human-information interaction, systems to touch mid-air images with haptic sensations are being developed. In addition, various elemental technologies are being developed, such as aerial image display devices, force presentation devices for hands, and tactile presentation devices for fingertips.

Nursing support

To support nursing education, educational materials that provide experiences close to the reality of actual practice are being developed by applying robotics and information technology. In addition, a system that partially automate nursing tasks is being developed to reduce the nursing burden.









