Laboratory / Center profile

Ubiquitous Communication Laboratory  [Website in Japanese]

Representative: Professor Shinichiro Haruyama

Purpose

The Ubiquitous Communication Laboratory pursues a society where people can understand each other by communicating whenever and wherever they want (i.e., ubiquitously), a society where anybody can live safely and soundly, and a society where new services can blossom. More specifically, we organize weekly seminars to exchange ideas and opinions with companies and organizations, exploring how to realize such a society. Our research covers a wide range of topics, such as ways to support people with disabilities, safe automobile driving, location detection using visible light and its standardization.

Examples of Our Activities

- Research and development of systems that enable people with visual impairment to travel safely indoors and outdoors
- Research and development of information communications systems for the elderly with hearing impairment
- Research on methods of supporting self-motivated career development for people with development disabilities
- Research and development of indoor navigation using visible light communication and its institutional arrangement
- Proposal of visible light communication to the Japan Electronics and Information Technology Industries Association (JEITA) for a Japanese standard and to the International Electrotechnical Commission (IEC) for a global standard
- Research and development of safe driving support for automobiles using visible light communication, wireless communication and image processing technology
- Development of tools for improving golf swings
- Exploration of the expansion of apparel markets using WEB
- Development of new content use with digital watermarking technology
- Development of robot systems as a preparation for the architecture sector of the ET Robot Contest 2013

Members of the Ubiquitous Communications Laboratory

Developing a robot system for the ET Robot Contest 2013