

Department of Architecture
and Civil Engineering

Key words

Disaster prevention, Education on disaster prevention, Robotic development ,
Medical-engineering collaboration, Disaster recovery



Dr.Eng. / Professor

Shuhei Takeda

Education

Fukui University of Technology, Department of Civil Engineering
Kanazawa University, Graduate School of Natural Science and Technology

Professional Background

Nihonkai Consultant Co., Ltd. / Chief Engineer
Fukui University of Technology / Lecturer, Associate professor

Consultations, Lectures, and Collaborative Research Themes

Consultations and Lectures: Education for disaster prevention, Disaster recovery Collaborative
Research Themes: Robotic development , Medical-engineering collaboration,

e-mail address

s-takeda@fukui-ut.ac.jp

Main research themes and their characteristics

[The design of disaster prevention]

A wide range of natural disasters occurs in Japan. A massive earthquake of magnitude of 9.0(Great East Japan Earthquake) occurred Friday 11 in 2011, off the Pacific coast of the northeastern part of the Tohoku Region. It is concerned that the "Nankai trough Earthquake" and the "Tokyo Inland Earthquake (Metropolitan Earthquake)" will occur in the near future. From the above, it is important to keep the performance of "Social System" after the natural disasters. Thus, we have been studying on disaster prevention and reduction of the effects of a natural disaster. Recently we focus the "Specific Research" as follows.

Specific Research

investigation : Disaster damage investigation(Fig.1), City reconstruction plan

Medical and welfare facility : Medical-engineering collaboration, Disaster Recovery on medical equipment (Fig.2), Wearable robotic (Fig.7)

Education on disaster prevention : Disaster prevention plan, BCP, Hyper active training (Fig.3, Fig.4) Damage

Research on infection control : Development of a simple negative pressure chamber(Fig.5)

Heat Stroke Prevention : Development of heat stroke prevention system(Fig.6)



Fig.1 Disaster damage investigation



Fig.2 Disaster Recovery on medical equipment



Fig.3 Active training for evacuation at school



Fig.4 Evacuation behavior for person requiring assistant



Fig.5 Simple negative pressure chamber



Fig.6 Heat stroke prevention system

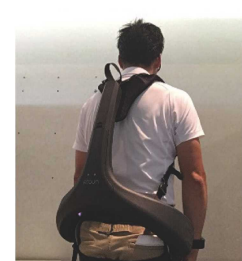


Fig.7 Wearable robotic system

Major academic publications

Design of assist suit that supports the waist; Shuhei Takeda, The 3rd branch of Japanese Society for the Science of Design, 2020.3.

Support on regarding support for person needing support during evacuation process; Shuhei Takeda, Fumiyo Araki, The 3rd branch of Japanese Society for the Science of Design, 2020.3.