Research Project Supported by Collaborative Research, Commissioned Research and Grant Donation 2016

Collaborative Research

 Financial Provider for Research: Aqua Clue Research Representative: Yuichi Yaguchi

Title: Development of a Remote Centralized Management Device Utilizing

Image Processing Technology

Amount: None

2. Financial Provider for Research: International Institute Of Advanced Sceince and Technology

Research Representative: Takeaki Sampe, Saji Hameed

Title: Technology Development of the Energy Network Utilizing Estimation

Technique of Production of Electricity from Renewable Energy

Amount: None

3. Financial Provider for Research: Japan Aerospace Exploration Agency Research Representative: Ketaro Naruse

Title: Triangulation based simultaneous localization and mapping by mas-

4. Financial Provider for Research: Toshiba Corp.

Research Representative: Yoichi Tomioka

Title: A Study on Fast Lithography Hotspot Detection

Amount: $$\mathbb{Y}$ 990,000$

5. Financial Provider for Research: Embedded Solution Co.Ltd

Research Representative: Takafumi Hayashi

Title: Development of vehicle installation information security

Amount: ¥ 110,000

6. Financial Provider for Research: Corporation Temari Research Representative: Lei Jing Title: Research on tooth brushing behavior recognition algorithm

Amount: \$ 110,000

7. Financial Provider for Research: Simplex Quantum Co.,Ltd.

Research Representative: Wenxi Chen

Title: Development of the personal authentication algorithm from electro-

cardiographic waveform Amount: Y 7,700,000

8. Financial Provider for Research: Institute of Space and Astronautical Sciience, JAXA

Research Representative: Hirohide Demura

Title: Research of obstruction detection method for evaluation of landing

point in lunar and planetary exploration

9. Financial Provider for Research: Kitashiba Electric Co.,Ltd.

Research Representative: Qiangfu Zhao

Title: Research about automation of inspection process in the motor manu-

facturing facility Amount: ¥ 990,000

10. Financial Provider for Research: Toshiba Corp.

Research Representative: Yukihide Kohira

Title: Method to configure the high lithography margin layout in a short

time

Commissioned Research

1. Financial Provider for Research: Japan Science and Technology Agency Research Representative: Toshiaki Miyazaki

Title: Enhancement of disaster resilient functions to prevent and reduce damages

uamages

Projects

2. Financial Provider for Research: Japan Science and Technology Agency Research Representative: Junbo Wang

Title: Dynamic Evolution of Smart-Phone Based Emergency Communica-

tions Network

3. Financial Provider for Research: Ministry of Internal Affairs and Communications

Research Representative: Toshiaki Miyazaki Title: Demand Addressable Sensor Network

4. Financial Provider for Research: Fukushima Prefecture

Research Representative: Ketaro Naruse

Title: Development of farming support robot (weeding robot system for rice

fields)

5. Financial Provider for Research: ASAHIDENSHI Co.,Ltd

Research Representative: Wenxi Chen

Title: Development of Sleep Monitoring System for Elderly Care Facilities

6. Financial Provider for Research: Sync, Inc.

Research Representative: Yuichi Yaguchi

Title: Research into a database design that that assures high speed and

confidentiality

Amount: ¥ 3,696,000

7. Financial Provider for Research: Ministry of Internal Affairs and Communications

Research Representative: Song Guo, Toshiaki Miyazaki

Title: Tracking of Living Activity and Health Condition in Smart Home us-

ing Radio reflection and Big data

8. Financial Provider for Research: Kikuchi Seisakusho, Co. Ltd.

Research Representative: Yuichi Yaguchi

Title: "Data processing and collecting sample of acquirable 3D topography data using 3D mapping technology" "Examination for a fall accident simulator development"

Amount: $\frac{1}{4}$ 7,000,000

9. Financial Provider for Research: Kikuchi Seisakusho, Co. Ltd.

Research Representative: Yuichi Yaguchi

Title: Position and orientation estimation of multi-copters by image and

other sensors

10. Financial Provider for Research: GClue, Inc.

Research Representative: Yuichi Okuyama

Title: Evaluation test in the research and development of 360 degrees can be

measured LiDAR sensor Amount: $$\pm$ 495,000$

11. Financial Provider for Research: East Japan Accounting Center Co.,Ltd.

Research Representative: Yutaka Watanobe

Title: Research regarding the Interoperability between OpenRTM and ROS

Grant Donation

1. Donation Provider: IITM (Indian Institute of Tropical Meteorology)

Research Representative: Saji Hameed

Title: Monsoon Mission Amount: \mathbf{Y} 4,279,837

2. Donation Provider: The Telecommunications Advancement Foundation

Research Representative: Anh T. Pham

Title: Hybrid Architecture and Cross-Layer Design for Free-space Optics/Millimeter-

Wave Front/Backhaul of the Next-Generation Mobile Networks

Amount: $\pm 552,000$

Projects

3. Donation Provider: Foundation for Research of Arteriosclerosis Research Representative: Wenxi Chen

Title: Estimation of Vascular Aging and Hypertension from Augmentation

Index (AI)

Amount: ¥ 1,000,000

4. Donation Provider: Kawai Foundation for Sound Technology and Music Research Representative: Julian Vilegas

Title: Improving singing experience for people with tuning difficulties

Amount: ¥ 500,000

5. Donation Provider: Student Affairs Division (Department for Student Affairs), Revitalization Center

Title: IT Nisshin-Kan (4,000,000 by SAD), Research Promotion for LICTiA

(6,000,000)