

Research Project Supported by Competitive Research Funding 2013

General Research

1. Principal Investigator: Neil Yen
Detailed Research Area: Young
Title: Cyber Eye: A computational approach towards disaster-driven decision-making supports
Amount: ¥ 868,000
2. Principal Investigator: Takafumi Hayashi
Detailed Research Area: Seedbed/Collaborative
Title: Design and Analysis of Sequences and its application to Instrumentation, Communications, Information Security, Signal Processing, Sensor Networking, and Smart Grid
Amount: ¥ 751,000
3. Principal Investigator: Anh T. Pham
Detailed Research Area: Young
Title: Toward the Paradigm of Ultra-wideband MIMO-OFDM Optical-Wireless Communications
Amount: ¥ 1,470,000
4. Principal Investigator: Gennadiy Nikishkov
Detailed Research Area: Others
Title: CT-based 3D mesh generation for composite coupons
Amount: ¥ 750,000
5. Principal Investigator: Ben A. Abderazek
Detailed Research Area: Seedbed
Title: High -Radix NetworkNetwork -on -ChipChip Architecture for Future Many-Core ore Systems
Amount: ¥ 1,275,000
6. Principal Investigator: Ian L. Wilson
Detailed Research Area: Seedbed

Projects

- Title: Tongue Bracing in English and Japanese Speech
Amount: ¥ 765,000
7. Principal Investigator: Song Guo
Detailed Research Area: Young
Title: Renewable Energy Powered Data Centers
Amount: ¥ 1,363,000
 8. Principal Investigator: Xin Zhu
Detailed Research Area: Young
Title: Study on the relationship between complex fractionated atrial electrograms and autonomic nervous system activities using cardiac computer simulation
Amount: ¥ 694,000
 9. Principal Investigator: Lei Jing
Detailed Research Area: Young
Title: Design of new version of Magic Ring for daily life demos and experiments
Amount: ¥ 1,319,000
 10. Principal Investigator: Michael Cohen
Title: Virtual Heart Auscultation: Tangible human patient simulator with programmable acoustic responses
Amount: ¥ 1,378,000
 11. Principal Investigator: Yutaka Watanobe
Detailed Research Area: Collaborative
Title: Coding Style Classification and Analysis for Aizu Online Judge
Amount: ¥ 1,360,000
 12. Principal Investigator: Subhash Bhalla
Detailed Research Area: Seedbed
Title: "Quasi-Relational Query Language for Persistent Standardized EHRs:Using Cloud-based Databases"
Amount: ¥ 1,073,000
 13. Principal Investigator: Incheon Paik
Detailed Research Area: Seedbed

Title: Context Aware Service Clustering and Composition
Amount: ¥ 1,125,000

14. Principal Investigator: Julian Villegas
Detailed Research Area: Young
Title: Real-time implementation of head-related impulse response filtering with distance adjustability
Amount: ¥ 910,000
15. Principal Investigator: Wang Junbo
Detailed Research Area: Young
Title: Optimized Positioning Methods for Mobile Mesh Routers in Anti-Disaster Communication Networks
Amount: ¥ 675,000
16. Principal Investigator: Emiko Kaneko
Detailed Research Area: Seedbed
Title: Neutralization by Aizu Dialect speakers: their perception and production
Amount: ¥ 1,220,000
17. Principal Investigator: Cong Thang Truong
Detailed Research Area: Young
Title: Cross -llyer Design of Visible Light Communication based Indoor Multimedia Networks
Amount: ¥ 1,181,000
18. Principal Investigator: Wenxi Chen
Detailed Research Area: Seedbed
Title: Support System for Evidence-Based Healthy Aging from Big Data Analysis
Amount: ¥ 732,000
19. Principal Investigator: Anna Danielewicz-Betz
Title: Classification of (fuzzy) linguistic features of emotions related to stress and its relief
Amount: ¥ 659,000

Projects

20. Principal Investigator: Younghyon Heo
Detailed Research Area: Young
Title: Influence of picture questions on English reading comprehension in the Center Examination
Amount: ¥ 705,000
21. Principal Investigator: Igor Lubashevskiy
Detailed Research Area: Seedbed
Title: Stochastic Description of Discontinuous Human Control: Theory and Virtual Experiments
Amount: ¥ 1,293,000
22. Principal Investigator: Jung-pil Shin
Detailed Research Area: Seedbed
Title: Human Computer Interaction on Pen Computing
Amount: ¥ 1,012,000”
23. Principal Investigator: Naomi Ogasawara
Detailed Research Area: Seedbed
Title: Acoustic and para-linguistic characteristics in speech of truth-telling and lying
Amount: ¥ 701,000
24. Principal Investigator: Junji Kitamichi
Detailed Research Area: Seedbed
Title: Development of a Safety RTOS and Propose of Design Method of Hardware Architecture for Critical Systems
Amount: ¥ 689,000

Mid-Term Category

1. Principal Investigator: Saji N. Hameed
Detailed Research Area: CAIST
Title: Monitoring and Analysis of atmospheric water vapor over Aizu using a dense network of low-cost Global Navigation Satellite System receivers ? towards nowcasting capability for extreme weather
Amount: ¥ 1,930,000

2. Principal Investigator: Alexander P. Vazhenin
 Detailed Research Area: Strategic
 Title: Service-Oriented Multistage Tsunami Modeling Tools
 Amount: ¥ 1,093,000

3. Principal Investigator: Naohito Nakasato
 Detailed Research Area: Strategic
 Title: Applications of OpenCL to High Performance Computing
 Amount: ¥ 1,658,000

4. Principal Investigator: Hirohide Demura
 Detailed Research Area: CAIST
 Title: Development of optical instruments for landers on next planetary missions
 Amount: ¥ 862,000

5. Principal Investigator: Tuan Duc Pham
 Detailed Research Area: CAIST
 Title: Dynamics of Biological Cells in Microscopy Images
 Amount: ¥ 1,660,000

6. Principal Investigator: Haruo Terasaka
 Detailed Research Area: CAIST
 Development of weather information collection and delivery system
 Amount: ¥ 812,000

7. Principal Investigator: Naru Hirata
 Detailed Research Area: CAIST
 Title: High-precision shape modeling of asteroids and data archive systems
 Amount: ¥ 1,900,000

UBIC Category

1. Principal Investigator: Toshiaki Miyazaki
 Detailed Research Area: R and D local industry
 Title: Demand Addressable Sensor Network
 Amount: ¥ 1,685,000

Projects

2. Principal Investigator: Qiangfu Zhao
Detailed Research Area: R and D local industry
Title: Construction of a Prototype System for Secure Cloud Storage Service
Amount: ¥ 1,438,000
3. Principal Investigator: Keitaro Naruse
Detailed Research Area: R and D local industry
Title: Development of Deformable / Rugged Wheels for Rice-Field Weeding Robots
Amount: ¥ 1,468,000
4. Principal Investigator: Irina I. Khmyrova
Title: Computer modeling of light-emitting diodes with planar surface based on novel numerical algorithm for light extraction
Amount: ¥ 913,000