Research Project Supported by Competitive Research Funding 2015

General Category

1. Principal Investigator: Rockell Kim Forrester
   Title: Interactive Composition to Support Japanese Learners' L2 Development
   Amount: ¥ 100,000

2. Principal Investigator: Jung-pil Shin
   Title: Human Computer Interaction on Pen Computing
   Amount: ¥ 520,000

3. Principal Investigator: Debopriyo Roy
   Title: Physical LEGO Design for Robots and 3D Printing in Creative Factory Contexts for English Language Learning
   Amount: ¥ 100,000

4. Principal Investigator: Kenta Ofuji
   Title: Statistical analysis of linguistic characteristics in evacuation calls
   Amount: ¥ 100,000

5. Principal Investigator: Junji Kitamichi
   Title: Formal approach for system fault analysis of embedded systems
   Amount: ¥ 349,000

6. Principal Investigator: Mohamed Hamada
   Title: Learning Style Index :a Phase for Smart Multimedia Learning Framework
   Amount: ¥ 169,000

7. Principal Investigator: Yan Pei
   Title: Linear and generalized principal component discriminant analysis: study on establishment analytical framework fundamental of data projection approaches
   Amount: ¥ 265,000

8. Principal Investigator: Hiroshi Saito
   Title: Development of System-level Design Environment for FPGA-based Systems
   Amount: ¥ 865,000

9. Principal Investigator: Ben A. Abderazek
   Title: Photonic 3D-Network-on-Chipfor High-throughput Many-core System-on-Chip
   Amount: ¥ 1,305,000

10. Principal Investigator: Neil Y. Yen
    Title: Human-centric Decision-making Support for Natural Disaster Recovery Support
    Amount: ¥ 385,000

11. Principal Investigator: Shigeyuki Aoki
    Title: Revision of Toulmin's Model of Argument through the construction of argument database
    Amount: ¥ 213,000

12. Principal Investigator: Ryoji Sawa
    Title: Stochastic Equilibrium Selection with Behavioral Players
    Amount: ¥ 684,000

13. Principal Investigator: Wenxi Chen
    Title: Development of an Automatic Monitoring System for Bathtub Electrocardiogram
    Amount: ¥ 827,000

14. Principal Investigator: Lei Jing
    Title: R & D on wearable engine design and basic functional modules
    Amount: ¥ 494,000

15. Principal Investigator: Moonyoung Park
    Title: Enhancing Mobile-Assisted Language Learning (MALL) through Usability Testing and Curriculum Innovation
    Amount: ¥ 116,000

Projects

16. Principal Investigator: Anh T. Pham
    Title: Integrated FSO/PON for Next-Generation Access Networks: Cross-Layer Designs and Enabling Technologies
    Amount: ¥ 1,012,000

17. Principal Investigator: Song Guo
    Title: Robot-assisted deployment and maintenance of wireless sensor networks
    Amount: ¥ 1,373,000

18. Principal Investigator: Hitoshi Oi
    Title: Power-Efficient System Design with Multi-core Processors
    Amount: ¥ 100,000

19. Principal Investigator: Yoichi Tomioka
    Title: Power-Efficient Human Detection and Privacy Protection Hardware For Drones
    Amount: ¥ 938,000

20. Principal Investigator: Younghyon Heo
    Title: Developing a corpus of useful English vocabulary and sentence structures for Japanese computer science majors learning academic writing
    Amount: ¥ 376,000

21. Principal Investigator: Julian Villegas
    Title: My city-Your city. A   benchmarking platform for environment indicators
    Amount: ¥ 228,000

22. Principal Investigator: Shigeo Takahashi
    Title: Visual Analytics of Multivariate Data via Mathematical Fibers: Application to Spatiotemporal Topographic Analysis of Radiation Level
    Amount: ¥ 1,210,000

23. Principal Investigator: Takako Yasuta Title: Comics for L2 Paragraph Writing: How visuals can help EFL learners to understand paragraph structures
    Amount: ¥ 132,000

24. Principal Investigator: Nobuyoshi Asai
    Title: A robust Server construction of Hyper English Dictionary with Etymology
    Amount: ¥ 100,000

25. Principal Investigator: Peng Li
    Title: Prolong Usage Time of Smartphones in Disaster Environment
    Amount: ¥ 948,000

26. Principal Investigator: Irina Khmyrova
    Title: Modeling and analytical study of light-emitting diodes with designed electrode(continued)
    Amount: ¥ 404,000

27. Principal Investigator: Saji N. Hameed
    Title: Applying computer and computational sciences to describe and analyze real-world environmental issues
    Amount: ¥ 820,000

28. Principal Investigator: Cong Thang Truong
    Title: Quality-enabled adaptation for video streaming over mobile networks
    Amount: ¥ 712,000

29. Principal Investigator: Akihito Nakamura
    Title: Knowledge-Based Semi-Automation of Computer Security Management
    Amount: ¥ 554,000

30. Principal Investigator: Maxim Ryzhii
    Title: Study of nonlinear cardiac electrical dynamics with heterogeneous oscillator model
    Amount: ¥ 172,000

31. Principal Investigator: Ken Nakazawa
    Title: Physical education program for SGU
    Amount: ¥ 141,000

Projects

32. Principal Investigator: Emiko Kaneko
    Title: Enhancing Unique Features of UoA Short-term Study-abroad Programs
    Amount: ¥ 785,000

33. Principal Investigator: Vitaly Klyuev
    Title: Emotion Detection in the Micro blogosphere
    Amount: ¥ 100,000

34. Principal Investigator: Yukihide Kohira
    Title: Power Consumption Reduction for General-Synchronous Circuits in FPGA
    Amount: ¥ 694,000

35. Principal Investigator: Tatsuki Kawaguchi
    Title: Project Based Learning as a Pedagogical Strategy for Developing Skills in Glocal Collaboration in Aizu and World
    Amount: ¥ 384,000

36. Principal Investigator: Ian Wilson
    Title: Differences between Japanese and English underlying articulatory setting
    Amount: ¥ 335,000

37. Principal Investigator: Yuichi Yaguchi
    Title: Flip Education Support System using Moodle
    Amount: ¥ 475,000

38. Principal Investigator: Yutaka Watanobe
    Title: Integration of Software Components based on Service Oriented Architecture for Research and Education Amount: ¥ 1,029,000

39. Principal Investigator: John Brine
    Title: A System for Awarding Points in the Digital Badges English-village
    Amount: ¥ 226,000

Mid-Term Category

1. Principal Investigator: Incheon Paik
   Title: Workflow Generation for Automating Process of Big Data Analytics using Service Composition
   Amount: ¥ 1,132,000

2. Principal Investigator: Igor Lubashevskiy
   Title: Emergent Mechanism of Categorization by Humans under Uncertainty: Experiments and Modeling of Psychophysiological Processes
   Amount: ¥ 700,000

3. Principal Investigator: Subhash Bhalla
   Title: Relational Database Query Languages for Large Scale Medical Information Repositories over Cloud-based Databases
   Amount: ¥ 559,000

UBIC Category

1. Principal Investigator: Qiangfu Zhao
   Title: Daily activity recognition based on a sparse infrared sensor array
   Amount: ¥ 1,252,000

2. Principal Investigator: Toshiaki Miyazaki
   Demand Addressable Sensor Network (3rd year)
   Amount: ¥ 1,724,000

3. Principal Investigator: Michael Cohen
   " " Mobile Ambient, "practically panoramic" whole-body entertainment
   Amount: ¥ 754,000

CAIST Category

1. Principal Investigator: Hirohide Demura
   Title: Development of fundamental technologies for lunar and planetary ex-

plorations
Amount: ¥ 1,906,000

2. Principal Investigator: Kyoko Okudaira
   Title: Development of initial analysis system for JAXA Tanpopo mission aerogel samples retrieved form the International Space Station
   Amount: ¥ 523,000

3. Principal Investigator: Xin Zhu
   Title: Study on sudden cardiac death: mechanism, prediction, monitoring and therapy
   Amount: ¥ 2,329,000

4. Principal Investigator: Keitaro Naruse
   Title: Development of RT middleware based almost unmanned robot weeding system in large-scale rice fields
   Amount: ¥ 2,344,000

5. Principal Investigator: Takafumi Hayashi
   Title: Could supporting Cyber Physical System Integration using Message Networking
   Amount: ¥ 1,520,000

6. Principal Investigator: Nohito Nakasato
   Title: Co-design of parallel architectures and parallel applications
   Amount: ¥ 2,265,000