

## 2014 Think Tank Team Outreach Program

### **EXTENDED PHASE 1 FINAL REPORT AND PHASE 2 APPLICATION DEADLINE: NOV 23<sup>rd</sup> 2014**

Think Tank Team (TTT) is a unique team inside Samsung Research America of interdisciplinary experimenters, located in San Jose. In recognition of the importance of research collaboration with academic and independent researchers, the Think Tank Team would like to help promote research that creates new ways of capturing, displaying, sensing, feeling, producing, and interaction. TTT is dedicated to the rapid exploration of technology, as well as risky forays into the frontier of what is possible. To this end, the timeline of the grants reflects immediacy, while the two-stage funding approach espouses risk-taking.

Research related (but not limited) to the following areas is encouraged:

#### **Imaging/Capturing**

- New ways of capturing (light field, computational optics, adaptive imaging, etc.)
- Enhancing photography, eg by adding new features, changing how optics behave, etc.

#### **Display technologies**

- Multi-viewer displays.
- New display technologies – high and low resolution, as well as ambient systems.
- Novel combinations of display and sensing technologies.

#### **Sensing**

- Sensing of actions, context, health, and more.
- New sensing technologies.
- Novel sensing applications.

#### **Robotics**

- Robotics in the home.
- Human-robot interaction for a specific human-centric purpose, eg. learning, diagnostics, etc.

#### **Energy**

- Energy harvesting and transmission.
- Energy conservation and storage.
- Home energy management.

**Design research:** design research to significantly improve or innovate in existing products or manufacturing techniques:

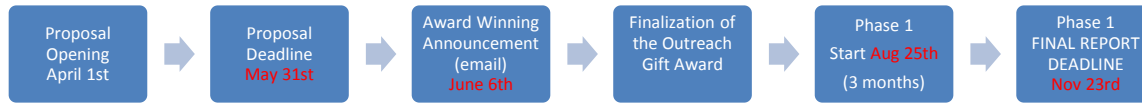
- New Materials – High performance glass, ceramics, organic and wood materials, textiles, etc.
- Mechanics – actuation, control, motion planning and dynamics, human augmentation, etc.
- New form factors – low-volume and mass production, hand and automated production, new form factors for existing systems, new capabilities, etc.

## **Eligibility**

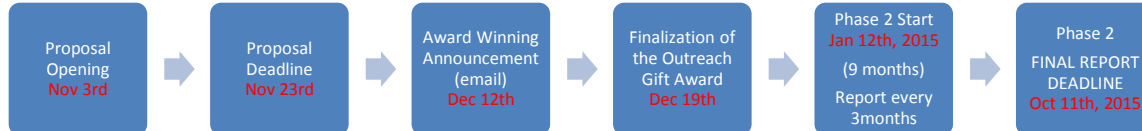
Academic faculty, students, and independent researchers are eligible to apply. TTT encourages international proposals and collaborative projects under this program.

## Timeline summary

### Phase 1: \$10,000.00 (3 months)



### Phase 2: \$50,000.00 (9 months)



## Application deadline: Phase 1

Applications must be submitted by 23:59:59 on **MAY 31<sup>st</sup>**, 2014 Pacific Standard Time (PST). Receipt will be acknowledged on that date. Late applications will be disqualified.

**NOTE: EXTENDED PHASE 2 APPLICATION DEADLINE: November 23<sup>rd</sup>, 2014.**

## Submission

Please include the following items in your submission [using the provided templates](#):

1. [MS Word] **Cover Page**.
2. [MS Word] **Research Project Specification: Phase 1**
  - a. Research Objectives
  - b. Significance of Research
  - c. Summary of related work areas
  - d. Research Plan and Technical Approach
  - e. Milestones, Expected Outcomes and Results
  - f. Release plans, if any.
  - g. Project Staff. Short bios and roles of the project staff.
3. [MS Excel] **Estimated costs** (in US dollars) This section should suggest the amount of the gift, as well as help TTT in estimating and improving future allocation of resources.
4. [PDF] **TTT Outreach Submission Checklist** with signature.
5. [PDF] **CV or portfolios** of project staff.

For explorations, the maximum limit for the Research Proposal Specification itself is **3 pages**. For continuation into the second phase, the proposal itself may not exceed **10 pages**. Additional pages may be used for presenting figures, images, additional data and bibliography.

Submissions must be made via email to [TTT-Outreach@sisa.samsung.com](mailto:TTT-Outreach@sisa.samsung.com) by the appropriate deadline.

## Proposal review procedures

Proposals are evaluated by a panel specified by TTT. Occasionally, proposals may be distributed to additional expert reviewers selected by TTT who may advise the panel. The decisions of the panel are final.

Reviewers consider the following criteria, among others, when evaluating proposals:

- Adherence to submission criteria. Failure to adhere to criteria and format is grounds for immediate disqualification.
- Clear description of project and problem space, as well as objectives.
- Feasibility of project in terms of funding and time available, as well clear identification of deliverables and goals.
- Demonstrated awareness of existing and prior work in the problem space.
- Feasibility of approach.
- Significance of work to target user community.
- Alignment of work area to TTT interests.
- Sufficiency of resources, expertise, etc.

The awards target a wide range of areas, and thus additional criteria may be considered by the panel as appropriate to type and area of research.

## Project Funding

Funding of projects is provided as **GIFT** in two stages. In the first stage, ten applicants will be selected from the initial pool of applications and will be awarded up to \$10,000 for a 3 month initial exploration starting on **Aug 25<sup>th</sup>**, 2014. The initial exploration phase is meant to prove the basic feasibility of the research direction. Reports on the first phase, along with proposals to continue the explorations into a second phase, are due at the end of the project funding period (**November 23<sup>rd</sup>**, 2014).

Starting on **November 23<sup>rd</sup>**, 2014, the second phase of evaluation will take place, and up to two of the ten initial explorations will be awarded a maximum (each) of \$50,000 for a 9 month project starting on **January 12<sup>th</sup>**, 2015 to further develop the research direction.

The following cost categories are eligible for direct funding:

- Time/Stipends for the principal investigator and research assistants
- Project-related travel
- Equipment (prorated if the useful life of the equipment extends beyond the project end)
- Supplies
- Other research expenses

Disclosure of indirect costs and institutional cost sharing is encouraged to assist TTT is refining its funding model in future Outreach cycles.

## Phase 1 Final Report

All awardees are required, as a part of the conditions of the gift, to submit final report to TTT via the designated contact email. Reports must be submitted before **November 23<sup>rd</sup>**, 2014. Permission must be granted to TTT to, at its discretion, publish and distribute part or all of the report.

The report is intended to provide TTT with information regarding the final outcomes of the project, and should include (as appropriate):

- Explanation of the relevancy of the research, as well as its unique contributions.
- Context relative to the state of the art of the field.
- Scope, methodology, or process.
- Analysis of work and efficacy of approach.
- Outcomes of research including papers, exhibitions, prototypes, etc.
- Possible future directions and further explorations.
- Feedback on major budget changes.

Should the results be sufficient for submission to a conference or journal, the pre-press paper may be used as a part of the final report.

## Confidential and Proprietary information

Participants shall ensure that no confidential or proprietary information is included in submitted proposals. SAMSUNG will treat all information submitted in proposals as non-confidential and non-proprietary.

Under TTT Outreach Program, the proposals will be reviewed by SAMSUNG personnel, including SAMSUNG researchers, who will become knowledgeable of the information provided by the researcher in the project proposal. During the evaluation process, SAMSUNG cannot maintain the confidentiality of information set forth in the proposals. Accordingly, SAMSUNG does not require, and does not desire, to receive any information that may be deemed confidential by the researcher or institution.

## Contact information

More information: <http://thinktankteam.info/outreach>

Questions and submissions: [ttt-outreach@sisa.samsung.com](mailto:ttt-outreach@sisa.samsung.com)

## Q&A

**I have been working with a colleague at another institution. Can we submit a joint proposal?**

Yes. Applicants from two or more separate institutions may submit a joint proposal for consideration to this program. However, only one representative institution's Principal Investigator ("PI") must submit a proposal with the all relevant information and estimated costs for each institution separately.

**Can more than one researcher from my institution submit a proposal?**

Yes. Multiple proposals may be submitted from any institution.

**If my institution has previously received an Samsung Electronics Co., Ltd. ("SEC") or related Samsung companies' other grant, am I still eligible to apply?**

Yes. Any forms of other grant from SEC or related Samsung companies do not affect your institution's eligibility to apply to TTT Outreach Program.

**What happens if I need to make a change to my proposal after submission?**

If you need to revise your proposal after submitting it, you can make changes and email again prior to the submission deadline. You will not be able to make any changes after the submission deadline has passed.