Slide 1
Dr. Suzi Iacono, Acting Assistant Director of CISE/NSF and Wen-Hann Wang of Intel gave opening remarks.

Slide 2
We will begin with a discussion of this partnership and the motivations behind it.
We will then discuss the scope of Visual and Experiential Computing program.
Because Intel will be an active participant in this process, we will carefully highlight the special aspects of the program administration and proposal selection. We will focus in particular on how it differs from proposal administration for our other programs and the different types of proposals.
We will close out our prepared remarks on questions that we think the community might ask about the program and then open the discussion to anyone on the Webinar.
As a reminder, these slides will be posted to the NSF website after the conclusion of this webinar. Please refer to the solicitation for the full program details. We are going to try to keep this webinar to an hour, but can stay longer if needed for Q&A.

Slide 3
NSF and Intel have come together to fund and support research in the area of Visual and Experiential Computing.
By bringing together their resources and expertise, NSF and Intel not only fund fundamental research in VEC areas such as Computational Photography, Simultaneous Localization and Mapping, Augmented Reality, Image and Video Understanding, and 3D Scene Understanding, but also to encourage applications to enable and/or enhance compelling human experiences. From NSF's perspective, our partnership with Intel can provide researchers with greater insight and access to industry needs, capabilities and resources, and will facilitate transition of research outcomes to practice.

Slide 4
Since we are trying to bring together different research communities, it is worthwhile clarifying the scope of the program. Visual computing research is about acquisition, analysis, and synthesis of visual information while experiential computing involves cyber enabled embodied experiences in various activities. An objective of visual and experiential computing is to create capabilities that are akin to "super-human senses" and will enable the perception of our world in new and exciting ways.

Slide 5
The goal of the VEC program is to foster novel, transformative, multidisciplinary approaches that promote research in VEC technologies, taking into consideration the various challenges present in this field.
Specific objectives include:
- Understand the range of technical issues affecting hardware and software in components, and their integration in sociotechnical systems

- Develop systems that allow us to effortlessly engage with visual representations that blur the boundaries between the real and virtual world.

The VEC program is interested in receiving proposals on any idea that addresses these Goals & Objectives.

Slide 6

The concepts of visual and experiential computing can be illustrated by these selected examples. We envision systems that can recognize events and activities in real time, reconstruct events immersively, autonomously drive a vehicle in a large scale area, and expand our vision to be able to "see" over a hill or around a corner. We can list many more examples of these capabilities. Exploring these exciting capabilities requires an interdisciplinary approach and advance fundamental research in some areas.

Slide 7

Based on these examples, we can come up with sample topics of interest:

- Advances in computational photography enable better capabilities in capturing visual data and processing features for image understanding, analysis, and synthesis.
- Vision based localization and mapping approaches for real-time indoor and outdoor autonomous navigation under any lighting conditions
- New augmented reality technologies on different platforms can revolutionize “task assistance” and “task training”
- Image and Video Understanding has been the core research goal for computer vision research
- New RGBD sensors have not only provided opportunities but also posted new challenges to 3D scene understanding

Of course, the scope of the VEC program is not limited to these sample topics of interest.

Slide 8

We will now discuss some of the important details in the solicitation. The main topics here revolve around three types of proposals invited by the solicitation.

I will remind everyone that only US Universities and Colleges are eligible to submit proposals.

The total anticipated funding amount is $6M, subject to the availability of funds.

Slide 9

Let’s move now into the logistics of the program.

Proposals to this joint program will be submitted to NSF with the following requirements

- All proposals will be up to 3 years with a total award value of up to $1M for small, up to $2M for Medium, and up to $3M for large proposals
- The submission deadline is 5 pm proposers’ local time February 20, 2015
- The title should start with the prefix “VEC: SMALL:” or “VEC: MEDIUM:” or “VEC: LARGE”, as appropriate

- Only two proposals per PI/co-PI/Senior personnel to VEC are allowed
- This limit is separate and distinct from other NSF programs
- No proposal containing or referencing classified material will be accepted

Proposals must follow all the usual NSF policies, including inclusion of biographical sketches, budgets and budget justifications, lists of references, data management plans, postdoctoral researcher mentoring plan (if applicable), etc. Proposals are submitted through Fastlane or grants.gov, as with any NSF proposal.

Slide 10

The NSF proposal review will be conducted according to the standard rules and procedures in place for NSF proposals.
Intel will conduct a separate review.
The review and award recommendations will be coordinated by a Joint NSF and Intel Working Group of program officers from both NSF and Intel.
Projects that are selected for joint funding by both NSF and Intel will be funded under two funding instruments. That is, NSF support will be provided via an NSF grant, and Intel support will be provided via an Intel contract.
Note that not all projects will necessarily be jointly funded, NSF or Intel may decide to fund certain projects separately.
The budget submitted with the proposal should include all necessary project funds without regard to the two funding organizations. The budget will be divided subsequent to selection.

Slide 11

Besides Intellectual Merit and Broader Impact criteria, NSF will ask reviewers to evaluate all proposals against two additional solicitation Specific criteria:

- The degree to which the project's technical research is likely to inform the realization of compelling human experiences enabled by Visual and Experiential Computing technologies.
- The degree to which the project's plans both pursue the development of a systems perspective and implement demonstrations of interrelated component research ideas.

Slide 12

NSF and Intel will manage their respective awards according to their own procedures and guidelines. Specifically Intel funds will be made available under a contract with specific conditions relating to Intel access to Intellectual Property developed through research supported by these funds.

1. Projects agree to distribute all source code that has been authored while working on an NSF/Intel award under a BSD, Apache or other equivalent open source license, but not GNU's General Public License (GPL) or Lesser/Library GPL, the Artistic License, or the Mozilla Public License. See the solicitation for specific guidelines.

Slide 13

2. Projects that generate data or software agree not to incorporate into this data or software any third-party code or background intellectual property, except by separate prearrangement with NSF and Intel if this incorporation would limit or restrict its ability to be distributed under an open source license.
3. Awardees may file patent applications, providing that they grant to Intel a non-exclusive, worldwide, royalty-free, sub-licensable license to all intellectual property rights in any inventions or works of authorship resulting from research conducted under the joint award.

Slide 14

Intel may separately fund its own personnel to directly participate in NSF/Intel Partnership research, part-time or full-time, with the universities awarded projects. These Intel researchers will work alongside the academic researchers, identifying opportunities for technical transfer, and being involved with the projects as advisors or as fellow researchers. Such deployment of Intel Researchers in Residence on campuses will require mutual consent by the Parties and respective awardees in the Project Management Plan for each award.

Further, Intel may designate one of its more senior, separately funded researchers to work alongside PIs. This senior researcher would help manage the project as a member of the Project Management Team. He/she would inject a perspective on commercial aspects and help with the day-to-day leadership of the project. He/she would also be responsible for working with the Intel Program Director to oversee the engagement of all other Intel researchers.

Slide 15

All awardees must submit annual reports to the respective funding agency. If a project is co-funded by NSF and Intel, then the PI must submit reports to both NSF and Intel, which are similar in content.

Intel will conduct annual retreats and may require deliverable reports to monitor project progress

Intel may conduct on-site annual reviews jointly with NSF. Intel may also lead the organization of phone calls with project teams; NSF may participate in these calls at its discretion.

Slide 16

In summary, the VEC Solicitation is an exciting new opportunity for NSF-funded researchers to work closely with industry and to explore an increasingly important research domain. VEC researchers will help to translate the information contained in complex visual and non-visual data sets into intuitive modes of human perception and interaction, and create accessible platforms for information capture, retrieval, analysis, and knowledge discovery.

Proposals are due to NSF on February 20, 2015.

If you have any questions after the end of this webinar, please contact an NSF and/or Intel program officer.

Slide 17
Our contact information is listed here. As a reminder, these slides will be posted to the NSF website after the conclusion of this webinar.

Slide 18
You will have a chance to ask questions shortly, but first we will review some of the questions we've received to date that we believe are of general interest.

Slides 19-27
These slides were read verbatim