



MEETING NOTICE & INVITATION  
Pacific Northwest Chapter • Society for Information Display

***Emerging Interactive Displays and Systems with Natural Sensing Technologies***

**Achin Bhowmik Ph.D.**

General Manager & CTO of the Perceptual Computing Group  
Intel Corporation

**Monday, December 8th, at 6:00 P.M.**

Intel Corporation  
Jones Farm Conference Center CR-JFCC-119  
2111 NE 25<sup>th</sup> Ave  
Hillsboro, OR. 97124

**Abstract**

How we interface and interact with computing and entertainment devices is on the verge of a revolutionary transformation, with natural user inputs based on touch, gesture, and voice replacing or augmenting the use of traditional interfaces based on the mouse, remote controls, and joysticks. With the rapid advances in natural sensing technologies, we are endowing the devices with the abilities to see, hear, feel and understand us and the physical world. As a result, displays are morphing from one-way interface devices that merely show visual content to two-way interaction devices that also directly receive natural user inputs and thus provide more immersive experiences. As an example, the recently announced Intel® RealSense™ Technology is enabling a new class of interactive and immersive applications based on real-time embedded 3D visual sensing. This talk will present the key technologies, applications and trends in the rapidly emerging field of interactive displays and systems enabled by the natural sensing and interfaces.

**Speaker Biography**



Dr. Achin Bhowmik is general manager and chief technology officer in the perceptual computing group at Intel, where he leads the research, development, and productization of advanced computing solutions based on natural human-interactions, intuitive interfaces, immersive applications and user experiences, branded as Intel® RealSense™ Technology. Previously, he served as the chief of staff of the personal computing group, Intel's largest business unit with >\$30B revenues in 2010. Prior to that, he led

the advanced video and display technology group, responsible for developing power-performance optimized multimedia processing architecture for Intel's computing products. His prior work includes liquid-crystal-on-silicon microdisplay technology and integrated optoelectronic devices.

As an adjunct and guest professor, he has advised graduate dissertations and taught graduate-level courses on advanced sensing and human-computer interactions, computer vision, digital image processing, and display technologies at the University of California, Berkeley, Kyung Hee University, Seoul, Korea, and University of California, Santa Cruz Extension. He has >150 publications, including two books titled "*Interactive Displays: Natural Human-Interface Technologies*" and "*Mobile Displays: Technology & Applications*" published by Wiley & Sons, and 27 issued patents. He is an associate editor for the Journal of the Society for Information Display, and editor for two special volumes on "*Advances in OLED Displays*" and "*Interactive Displays*".

He is the vice president of the Society for Information Display (SID), Americas, a member of the executive committee and board of the SID, chair of the display electronics committee, and a senior member of the IEEE. He is on the board of directors for OpenCV, the organization behind the open source computer vision library.

## **Seminar**

The Seminar is free. Please join the speaker for a no-host dinner after the seminar. Directions to the restaurant will be provided at the seminar. Non-Members are welcome. RSVP to Gary Johnson at [Gary.Johnson@tek.com](mailto:Gary.Johnson@tek.com) or (503) 627-1985. Please indicate if you plan to participate in the dinner.

The Pacific Northwest Chapter of the Society for Information Display was established for the following purposes:

- To support the activities and purposes of SID.
- To encourage and contribute to the scientific and educational advancement in the field of information display and to promote its use.
- To provide forums for the exchange and dissemination of ideas and knowledge relating to the field of information display.

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