

Symposium Keynote Speaker



Seema Deshpande

**Director, DLP Systems
Technology Development**

Texas Instruments, Inc.

**2017 CIE/USA
AAEOY
(Asian American
Engineer of the Year)
Awardee**

Forging Into the Future with Intelligent Machines and the Technologies that Enable Them

Seema Deshpande is Director of Systems Technology Development for Texas Instruments (TI) DLP® Products. She is responsible for the architecture, design and development of innovative products across projection, digital cinema, industrial and automotive applications. Seema manages a global organization of engineers responsible for the development of DLP products that support a wide range of applications including front projection and cinema, Pico projection, wearable displays, VR/AR, automotive head-up display, smart adaptive headlights, and 3-D printing.

Seema earned a Bachelor of Science degree in Electrical Engineering from Karnataka University, India and a Master of Science degree in Electrical Engineering from the University of Houston, Texas.

Abstract:

Autonomous cars are difficult to wrap one's mind around—not just the technology that makes them possible, but what this means for our future. A car that safely drives itself and that can react to the environment and real-time roadway hazards could be society's answer to solving accidents caused by distractions and human error. The semiconductor content in vehicles is rapidly growing. From self-parking cars to anticipatory braking, semiconductors have been critical to automotive innovations and this trend will continue to increase as we head towards a society with self-driving cars.

Sales of Unmanned Aerial Vehicle (UAV) also known as drones are expected to nearly triple in the next three years, according to the Federal Aviation Administration. Airborne drones are becoming commonplace, especially in the civilian world. Drones are increasingly being used not just for military purposes but also for agriculture, disaster response, energy production, environmental monitoring, construction, and sports activities. This growth is driven by drone technology innovation that's bringing new capabilities and uses for flying robots, beyond fun and entertainment.

Another semi-autonomous system that will see growth in the future is robots. Traditionally, robots have been used in industrial applications for some routine and precise applications. Now robots are finding much broader consumer acceptance with their roles in enterprise, education, and in assembly lines working alongside people thanks to technology innovations happening around making the human-machine collaboration an everyday reality.

This talk will look at some of the key technological innovations driving the growth of these intelligent machines making them a reality over the next several years.