Course ID # 110C:

**Renesas Next-generation Microcontroller and Microprocessor Technology Roadmap**

**Course Description:**
This lecture provides a comprehensive overview of the Renesas development strategy for next generation microcontrollers and microprocessors. Detailed content will explain the technical alignment of next generation architectures for various market segments and the design philosophy of 8, 16 and 32-bit microcontrollers and microprocessors that enables Renesas customers to reuse and build upon engineering investments made when using the available products. Finally, the session highlights Renesas’ commitment to adding products with enhanced features by boosting speeds, decreasing operating voltages, cutting power consumption, and adding flexible peripherals that provide smooth MCU/MPU migration paths.

*This course is part of the Computing Architectures track of sessions.*

**Track Description:**
This DevCon 2010 topic provides insights into the many aspects of Renesas' latest microcontroller and microprocessor technologies. Various sessions under this track will explain the technical alignment of next generation architectures for various market segments and the design philosophy of 8, 16 and 32-bit microcontrollers and microprocessors that enable Renesas customers to reuse and build upon engineering investments. This track will reveal the details of the new "RX" (Renesas Extreme) CISC architecture - a next-generation design that achieves 165 DMIPS performance with 10ns single-cycle flash access, yet offers very low power consumption: 500µA/MHz. High-performance computing will also be discussed covering 600+ MHz/1080 MIPS, FPU, DSP and power advantages. We will also cover the power-saving technology for extending the battery life of portable designs.

**Presenter: Ritesh Tyagi, Renesas Electronics America**

**Presenter Bio:**
*Renesas Electronics America*
Director – MCU Products & Solutions Marketing
   Product Marketing and Segment Marketing
   Responsibilities for 8,16 and 32-bit MCU families

Education
MSEE and MBA from University of Allahabad, India

Work Experience
More than 15 years of experience in MCU/MPU products and applications
MCU product definition and marketing launch
Solution development for key segments like consumer, Medical industrial and communication
Embedded software designs experience for consumer electronics