



## Faculty Workshop: Embedded Systems - An Application-Driven Approach

### Speaker Details

Name	Profile
 <p><b>Vinay Kumar Thapliyal</b> Technical Marketing Manager, Microcontrollers Division STMicroelectronics, India</p>	<p>Vinay Kumar Thapliyal is having more than 25 Years' experience in Semiconductor industry currently working with STMicroelectronics Pvt. Ltd since 17 years. He worked in various functions like Embedded Designs, Applications and Technical Marketing. He has vast international experience and worked on multiple projects for emerging markets in India, Middle-east &amp; Latin America inside ST for Industrial, Consumer and Automotive segments. He is presently heading India Marketing and Applications Group of the General Purpose Microcontrollers &amp; RF products for Microcontrollers Division in STMicroelectronics. He is also participating from ST in key Indian Government Initiatives on Smart Cities, Smart Metering and Standardization.</p>
 <p><b>Sridhar Ethiraj</b> Sr. Field Application Engineer, Microcontrollers Division STMicroelectronics, India</p>	<p>Sridhar Ethiraj is an Electrical &amp; Electronics Engineer graduated from PSG College of Technology. He is working as Field Application Engineer (Microcontrollers) for last 18 Years. He is working with STMicroelectronics since 2011, supporting customer product design and development based on STM32 / STM8 Microcontrollers for distinct applications. Sridhar Ethiraj has rich working experience with Cortex-M Microcontrollers, H8 / H8S / H8SX / R8C / M16C / SH / 720 / 8051 based cores. He has lots of hands-on experience in working with different hardware debugger tools, IDE compilers and assemblers meant for 4Bit / 8Bit / 16Bit &amp; 32Bit Microcontrollers.</p>



**Shubham Boharapi**  
Tech Leader, Microcontrollers  
Division  
STMicroelectronics, India

Shubham is currently working as a Tech. Leader with STMicroelectronics and has an Industry experience of over ten years as a developer, project leader on electronics systems for multi-disciplinary domains (HW & SW). His main area of expertise are Microcontrollers of various core, Embedded Software, HMI and Graphics.



**Krishan Solankil**  
Staff Engineer,  
Microcontrollers Division  
STMicroelectronics, India

Krishan is working with STMicroelectronics India since last 10 years in Embedded Applications support team. Having more than 15 years of experience in Embedded design and support. Worked on different Micro controller core like ARM7, ARM CM0 to CM7, MSP430, 8051, PIC, AVR etc. Worked on Applications like IoT, BLE, NFC, Automotive, Motor Control, Inverter, Metering, Industrial and Home Automation and many more.



**Alok Mittal**

Group Manager, Group  
Manager, System, Research  
and Applications  
STMicroelectronics, India

Alok Mittal is working with STMicroelectronics since 2001 and has Industry experience of over 26 years. He is B.E in Industrial Electronics and Postgraduate in Marketing Management. He has filed 8 patents, out of which 5 Patents are already Granted. Currently, he is holding the position of Senior Group Manager. He has written and contributed to several articles which were published in many Indian and International magazines. His main area of expertise are in Electronic Systems Development in the areas of IoT, Smart-Metering and Healthcare. Currently Alok Mittal is responsible for Bluetooth Mesh technology solution from STMicroelectronics.



**Nabarun Dasgupta**

Group Manager, Group  
Manager, System, Research  
and Applications  
STMicroelectronics, India

Nabarun Dasgupta is currently working as a Group manager with STMicroelectronics. He is with STMicroelectronics since 1999. With Overall 27years of Industry experience, he has expertise and interests in the areas of electronic systems design, Electric drives, Power Electronics, Industrial control, Digital communication, Embedded SW and Product management. He is inventor of two granted US patents. He received the B.E. degree from University College of Engineering, Osmania University in Electrical Engg. and M. Tech. in Industrial Drives (Electrical Engg.) from NIT Warangal. He also holds a PG Diploma in Business Management.



**Salil Jain**  
Staff Engineer, Group  
Manager, System, Research  
and Applications  
STMicroelectronics, India

Salil Jain is currently working as a Staff Engineer with STMicroelectronics, and has ten years of experience as a designer, architect, and project leader of electronics systems for multi-disciplinary domains (HW & SW). His main area of expertise are BLE Mesh, Power Line Communication, Metering and Healthcare. He has written several articles and papers in these fields. He is also the STM32 Microcontroller training member under e4i (Electronics For India) initiative. He is M.Tech from BITS PILANI.



**Dr. Manoj KUMAR**  
Director, System Research and  
Applications  
STMicroelectronics, India

Dr. Kumar is working in STMicroelectronics for last 22 years and is currently managing the System Applications and Integration LAB of the System Research and Application Organization in India; providing with a worldwide mission to build and support reference designs and system solutions in the areas of Connectivity (BLE, Sub GHz, Power Line Communication), Metering, Motor Control, Power & Lighting and IoT. On top of his worldwide responsibility, he is driving the in-house incubation program for startups in STMicroelectronics India and is responsible for University Collaborations. He is driving ST India STEM initiative. He is also leading ST Partner Program in India with a mission to provide global visibility to Indian partner companies. He has been contributing and representing STMicroelectronics in Standardization bodies in the fields of M2M, Smart Cities and Industry 4.0. A few Smart City pilots demonstrating ST's technologies for energy efficiency, Sub-GHz, Power Line Communication and BLE mesh have been created under his leadership. He is based out of Greater Noida, INDIA.



**Amit Kumar**  
Sr. Staff Engineer,  
Microcontroller Division  
STMicroelectronics, India

Amit Joined ST in 2006 and currently working as Sr. Staff Engineer in Microcontroller Division, India. He has added a lot of hands-on experience by working on various applications in Embedded domains such as Smart Metering, RF, Motor Control, Automotive & Automation. His main fields of interest are Embedded Applications, 8/32-bit Microcontrollers, Microprocessors, ML, Low Power RF.



**David Brooke**  
Principal Applications Engineer  
Arm

After graduating from Coventry University in 1982 with a Diploma in Electrical and Electronic Engineering David Brooke worked on many different electronic and embedded software projects until starting at Arm in 1996. While at Arm he has worked on development of a number of software and firmware products until he joined the support team in 2004 where he has worked in Team lead roles heading teams looking after development boards and advancing to his current job heading the team supporting Architecture Licensees for all profiles and architecture extensions (TrustZone, NEON, CCA). As well as development and support through his career he is also a training lead and have presented over 180 training courses worldwide.



**Francois Botman**  
Principal Research Engineer  
Arm

François is a Principal Research Engineer at Arm in Cambridge, with a specific focus on Cortex-M embedded processor architecture. He completed his PhD in low-power digital microelectronics in 2014, and subsequently worked in the aerospace industry then at Arm. His current role is a forward-looking study of emerging use-cases and implementation techniques, researching new technologies to enable and be leveraged in next-generation embedded processor designs. Most recently he has worked on DSP vector extensions, performance monitoring, debug enhancements for mutually distrustful software, and reliable and fault-tolerant computing.