



Dr. Gamal Refai-Ahmed

(AMD, USA)

Dr. Gamal Refai Ahmed is a highly respected technical executive with a distinguished career in thermal management, silicon architecture, and advanced packaging technologies. With over three decades of experience, he has made substantial contributions to high-performance computing (HPC), artificial intelligence (AI), and microelectromechanical systems (MEMS). Dr. Refai Ahmed has held senior positions at leading companies including AMD, GE, Cisco, and Nortel. In his current role at AMD as Senior Fellow and Chief Architect, Dr. Refai-Ahmed has been pivotal in developing advanced silicon power thermo-mechanical architectures and enhancing hardware thermal management and packaging technologies for Xilinx products across various sectors, including telecom, data centers, and automotive. His efforts have also led to the establishment of technology ecosystems that support the integration of HPC, NIC, AI, and ML within data centers.

Dr. Refai Ahmed's achievements have been recognized with his election to the National Academy of Engineering (NAE) and Fellowships with IEEE, ASME, and the Canadian Academy of Engineering (CAE). He has received numerous awards, including the Presidential Medal from Binghamton State University for his leadership in innovation and contributions to academia, as well as the IEEE Canada R.H. Tanner Industrial Leadership Silver Medal Award.

With over 160 patents and more than 120 publications in leading IEEE, ASME, and AIAA conferences and journals, Dr. Refai-Ahmed has established himself as a leading figure in his field. He holds a Ph.D. in Mechanical Engineering from the University of Waterloo, Canada. His active involvement in professional societies such as IEEE and ASME continues to shape the future of high-performance computing and advanced packaging technologies.

Dr. Refai Ahmed's career is characterized by his commitment to innovation and excellence in engineering, contributing significantly to technological advancements on a global scale. His work in electronic packaging and thermal management has had a lasting impact, and he continues to inspire the next generation of engineers and researchers.