Notice

A talk, jointly organized by the Dept. of EEE, BUET, IEEE ED/SSCS Bangladesh Jt. Chapter and IEEE EDS BUET Student Branch Chapter, is arranged as per the following schedule:

Date and Time:	5 January 2026 (Monday) at 4 PM
Venue:	Room no. 634, Dept. of EEE, ECE Building, BUET

Title: Semiconductor Chips - the fuel behind AI revolution
Speaker: Dr. Abu Mahmudul Hassan, Senior Director, Siemens Digital Industries Software

You are cordially invited to attend the talk.

Dr. A. B. M. Harun-Ur-Rashid
Professor and Head
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and
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Abstract: In Oct 2025, Nvidia's valuation surpassed 5 trillion dollars, making it the most valuable company in the world! What is going on with this Silicon Valley company? It is supplying the fuel needed to make AI ubiquitous around the globe. No doubt the AI revolution is shaking the world. This presentation will touch on what is making the AI revolution viable. AI dominance is fueled by specialized semiconductor chips known as AI accelerators. These tiny but monstrously powerful machines are making bots like ChatGPT viable. Every week new start ups are popping up in Silicon Valley (SV) with their secret sauce for AI accelerators - the race is on. Interestingly, semiconductor chips are enabling and benefiting from AI at the same time. It is a symbiotic ecosystem. An emerging trend in the industry is Agentic AI. Agentic AIs are specialized applications of AI targeting tasks like semiconductor design among many other possibilities. This presentation will also talk about the emergence of agentic AI to revolutionize semiconductor design flow. EDA companies including Siemens EDA is in the forefront of agentic AI to automate semiconductor design flows in a radical way.

Brief Biography of the Speaker: Dr. Abu Mahmudul Hassan is a senior executive in the high-tech

industry in Silicon Valley (SV), California. He has over three decades of hands-on and management experience in Semiconductor design, verification, and test flows. A BUET graduate in Electrical Engineering, he completed his Masters and PhD from McGill University, Canada with Commonwealth Scholarship. He started his career at Nortel, Canada developing EDA software for DFT (Design for Test). Later he moved to SV, CA with Mentor Graphics which was later acquired by Siemens AG. Dr. Hassan is now a senior Director with Siemens Digital Industries Software responsible for Digital Verification and Design for Test flows. He and his team, over the years, worked with almost every semiconductor chip company in the Americas providing EDA solutions including Agentic AI.