“Computer Science and Engineering Education”

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Computer Science and Engineering is a rapidly expanding field that provides a wide range of opportunities for students to engage in solving some of the biggest challenges in our increasingly global, knowledge-based economy for making our daily lives easier. It is projected that by year 2018, more than half of all STEM jobs would be in computer science related fields and the remaining jobs would also need significant computational skills. Therefore, educating the next generation workforce with adequate computer science and engineering background is critical for us. In this context, the CS for All proposal, announced by President Obama, is expected to trigger the momentum in CS education starting at the school level in US. Computer Science and Engineering education should train students in “computational Thinking” skills for solving grand challenge problems with proper problem solving skills. In this talk, we will discuss some of the key concepts of CSE education and how the CSE curriculum should be designed to cover these aspects. The challenges and opportunities in incorporating these concepts in the context of Indian education system will be discussed.