Computation as a conceptual tool for modern science

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Abstract

It was the singular genius of Alan Turing to capture the essence of computing with a machine: to compute, logicians were told to become engineers. Today, the favor is being returned. With the indispensability of the computer firmly established among scientists, we are now witnessing the rise of "computational thinking." This more ambitious phase of Turing's visionary program will see the algorithmic paradigm get woven ever more tightly into the fabric of modern science, especially biology. This (self-contained) talk will discuss this phenomenon with concrete examples.

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