The Computer Science of Molecular Programming

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Abstract. Computer science has its historical roots in mathematical logic and electrical engineering. However it quickly evolved into a separate discipline with its own methods for describing and controlling aspects of reality not addressed by its predecessors. This talk will examine ways in which computer science concepts—including abstraction, modularity, state, universality, concurrency, safety, specifications, verification, complexity, and randomness—are contributing to the development of molecular programming.

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