中央研究院 資訊科學研究所
Institute of Information Science, Academia Sinica

Distinguished Lecture Series

Model Checking Cell Biology

Tuesday, August 7th, 2012 10:00am
Auditorium 106 at New IIS Building

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Abstract

Mathematical models of real biological systems have predominantly been deterministic or stochastic continuous models. However, there are reasons to believe that at least some processes can be modeled in a "digital" way. Once we do that, we enter the domain of concurrent and reactive systems. Perhaps techniques from formal verification could lead to insights about the systems principles that allow biological systems using very low energy (and high noise) components to function dynamic environments. I will explore some past and future research directions in this area, as well as some of the non-computational challenges that arise in this kind of research.

For more infomation: http://www.iis.sinica.edu.tw/