

DNA Strand Displacement Schemes and their Application to Expectation Maximization Algorithm

EM or the Expectation Maximization algorithm is a procedure for estimating parameters of statistical models with latent variables. Recently, it has been shown that reaction networks can be used as computational machines to perform the EM algorithm[1] [2]. Further, DNA strand displacement can be used to implement CRNs with desired kinetics[3] [4]. We explore how to design a DNA strand displacement system to implement the EM system *in vitro*.

Summary

Primary author(s) : Prof. GOPALKRISHNAN, Manoj (Indian Institute of Technology Bombay); SINGH, Abhinav (UM-DAE Centre for Excellence in Basic Sciences, Mumbai)

Presenter(s) : SINGH, Abhinav (UM-DAE Centre for Excellence in Basic Sciences, Mumbai)

Session Classification : Posters