

Mathematics and Computer Science serving/impacting Bioinformatics

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Since the early days of Bioinformatics, it was clear that mathematics in general, and computer science in particular, have a lot to contribute to bioinformatics. Bioinformatics has made substantial progress in the last 20 years, using tools from computer science, mathematics and statistics.

This progress has been rather explosive and in many cases suboptimal (we will be a bit critical here) when observed with a formal/conventional eye. We will present several examples from the areas where we consider that there is still room for contributions from this community. In particular the areas of modelling and simulation, maximum likelihood methods and the interface between bioinformatics and computer algebra. As it will be seen there is plenty of work for the algorithms community.