



Matrix and tensor modeling in Artificial intelligence and data science

Mansoor Rezghi^{1,*}

¹ Department of computer science, Tarbiat Modares University, Iran

Abstract

For several decades, physics and engineering have been the primary sources of problems in matrix computations. However, in recent years, significant progress in artificial intelligence and data analysis has given rise to challenging problems that require efficient matrix techniques. Additionally, these fields contain a vast amount of data with multi-dimensional structures, for which tensors serve as the appropriate structure. In this lecture, we intend to discuss the main approaches and concepts in the field of utilizing matrix and tensor modeling in artificial intelligence and data science.

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* Rezghi@modares.ac.ir