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# Application of particle swarm optimization for the longest common subsequence problem

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We are proposing a novel approach to solve the longest common subsequence problem, which is a common computer science problem in the field of bioinformatics and application like diff. We are using particle swarm optimization heuristic technique, and a novel occurence listing technique for evaluating solutions. The occurence listing technique will be introduced in this study. This technique aims to keep lists of the sequence elements that offers criterias to evaluate randomly generated population of sequences. Our conclusion is the application of this novel technique works on the general case problems, which have an arbitrary number of input sequences.

## Biography

Ali Teoman Unay is a graduate student in the Department of Intelligent Computing Systems, İzmir University of Economics. He received his BSc. as Software Engineer, and completed his internship under Dr. Roth, Harvard Medical School, Boston, MA. USA.

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