

Generalized Fuzzy Metric Space with its Applications and Fuzzy Mappings

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Abstract: Fixed point theory itself is a magnificent combination of analysis (pure and applied), topology, and geometry. Over the last few decades, the theory of fixed points has become a very influential and important tool in the study of nonlinear analysis. In particular the use of fixed-point techniques has been increased enormously in such diverse fields as biology, chemistry, economics, engineering, dynamics, optimal control, game theory, and physics. In this paper, we extend the application of generalized fuzzy metric space and generalized locations with fuzzy mapping such as quasi-pseudo-metric spaces and cone metric spaces. Some assumptions are also acceptable for α -commuting, α -weakly consistent mapping, L -fuzzy mapping for L -fuzzy sets, and a pair of βFL - L -fuzzy mappings. Based on the above definitions, some interesting coincidence points, common fixed points, and fixed point results are obtained that generalize not only the applications and fuzzy mapping and several important results of generalized fuzzy metric space with multiplayer mapping in recent literature. They do, but also decrease. Some survival theory for the solution of a generalized class of nonlinear integral equations. Some practical examples have also been presented to increase the validity of this work.

Keywords: Software, EE, ML, SD, Techniques etc.

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