

# Computing Networks: A General Framework to Contrast Neural and Swarm Architectures

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Computing Networks (CNs) are defined. These are used to generalize neural and swarm architectures, namely artificial neural networks, ant colony optimization, and particle swarm optimization. The description of these architectures as CNs allows their comparison, distinguishing which properties enable them to perform complex computations and exhibit complex cognitive abilities. In this context, the most relevant characteristics of CNs are the existence multiple dynamical and functional scales.

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