Computational Intelligence in R

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R has become the de-facto standard for data analysis. Very frequently, in connection with data analysis, system identification and modeling are required tasks. Effective tools to address these problems are available from Computational Intelligence (CI). It is a field within the Artificial Intelligence that has emerged during last years. This field is concerned with computational methods inspired on nature and language and targeted for complex real-world problems for which traditional approaches are ineffective or infeasible. CI includes a number of techniques most of which were developed independently, and boost their joint cooperative use and hybridization. In particular, CI hosts artificial neural networks, evolutionary algorithms, fuzzy systems and hybrid intelligent systems. Several R packages for neural nets have been available for some time. Recently, the coverage for CI techniques has been extended with fresh releases for evolutionary algorithms and fuzzy systems packages. This will not only enrich the tool chest for available for the current R user community but also help to enlarge it by drawing users from other areas. In this talk we will provide un updated view of the state-of-the-art of Computational Intelligence in R, completed with some hints towards CI for big data.

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