

Secure Bio Semantic Computing Scheme

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Abstract : In this paper, the secure BioSemantic Scheme is presented to bridge biological/biomedical research problems and computational solutions via semantic computing. Due to the diversity of problems in various research fields, the semantic capability description language (SCDL) plays an important role as a common language and generic form for problem formalization. SCDL is expected to be essential for future semantic and logical computing in the Biosemantic field. We show several examples of Biomedical problems in this paper. Moreover, in the coming age of cloud computing, the security problem is considered to be a crucial issue and we presented a practical scheme to cope with this problem.

Keywords : biomedical applications, private information retrieval (PIR), semantic capability description language (SCDL), semantic computing

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