

Concepts and Insights on Systems Biology

Sapaty PS*

Institute of Mathematical Machines and Systems, National Academy of Sciences, Ukraine

Computer science and systems biology is a modern science developed from the advancements in biological and information science. The current Volume 9, Issue 4 of the journal focuses on such studies as algorithm, genetic algorithm, systems biology, computer applications, robotics, artificial intelligence, bioinformatics, biostatistics, cloud computation, computational sciences, data mining.

Research paper of Pop describes a novel improved genetic algorithm for solving dual multimodal functions. The article uses the crossover mutation and increased dimension of genetic operators to obtain a convergent population. Results of this study clearly imply an improvement over existing work due to implementation of the algorithm [1].

Raychaudhuri in his research article, discusses in silico approach to find an optimal strategy for the selective targeting of cancer cells. The work uses Monte Carlo simulation based single cell analysis to provide the regulatory mechanisms for generating chemo-resistance under TRAIL induction. Findings of this study depict the latter as being useful in subtype classification and in characterization of a given tumor, also for finding an optimal strategy in targeting a given tumor [2].

Larik et al.'s article, based on a survey among medical doctors with the help of survey questionnaire, mainly focuses on such diseases as

male infertility, hearing impairment, and Brain Tumor. Results of the study depict the intensity of health issues related to the wireless devices such as mobile phone, which accounts for 96%, Bluetooth device 32%, laptop 54%, tablet pc 14%, and wireless router 20% [3].

Saeed et al. have presented a research article considering automatic seizure onset detection in long term pediatric EEG signals [4]. Aboubakr HA et al.'s study on silico analysis explores the human rab8b protein as a cancer target [5].

References

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