Computational Ecology and Software

The Computational Ecology and Software (CES) is an open access, peer-reviewed online journal that considers scientific articles in all different areas of computational ecology. It is the transactions of the International Society of Computational Ecology. The journal is concerned with the ecological researches, constructions and applications of theories and methods of computational sciences including computational mathematics, computational statistics and computer science. It features the simulation, approximation, prediction, recognition, and classification of ecological issues. Intensive computation is one of the major stresses of the journal. The journal welcomes research articles, short communications, review articles, perspectives, and book reviews. The journal also supports the activities of the International Society of Computational Ecology. The topics to be covered by CES include, but are not limited to:

- Computation intensive methods, numerical and optimization methods, differential and difference equation modeling and simulation, prediction, recognition, classification, statistical computation (Bayesian computing, randomization, bootstrapping, Monte Carlo techniques, stochastic process, etc.), agent-based modeling, individual-based modeling, artificial neural networks, knowledge based systems, machine learning, genetic algorithms, data exploration, network analysis and computation, databases, ecological modeling and computation using Geographical Information Systems, satellite imagery, and other computation intensive theories and methods.
- Artificial ecosystems, artificial life, complexity of ecosystems and virtual reality.
- The development, evaluation and validation of software and algorithms for computational ecology. The development and evaluation of apparatus, instruments and machines for ecological and environmental analysis, investigation and monitoring based on the software of computational ecology.
- Methodological applications of computational ecology in the researches of ecology and environmental sciences.

Authors can submit their works to the email box of this journal, ces@iaees.org and (or) wjzhang@iaees.org. All manuscripts submitted to CES must be previously unpublished and may not be considered for publication elsewhere at any time during review period of this journal.

In addition to free submissions from authors around the world, special issues are also accepted. The organizer of a special issue can collect submissions (yielded from a research project, a research group, etc.) on a specific topic, or submissions of a conference for publication of special issue.

Articles