CALL FOR PAPERS

ANALYSIS OF ALGORITHMS

Special Issue in *Combinatorics, Probability & Computing*

Analysis of Algorithms is an area of Theoretical Computer Science that was initiated by D. E. Knuth almost 40 years ago in order to understand behaviors of algorithms from a quantitative point of view. (We have just celebrated the $(100)_8$th birthday of D. E. Knuth.) Performance evaluation of algorithms has been recently a subject of renewed interest due to resurgence of interest in randomized and probabilistic algorithms.

We are now witnessing some highly nontrivial developments in the area of analysis of algorithms either due to novel applications (e.g., molecular biology, dynamic data structures, randomized algorithms, graphs, security) or due to new methodological tools (e.g., symbolic computations, information theory, contraction method). These problems are both interesting and mathematically very challenging. The time has come to summarize our results and formulate new challenges.

The special issue is seeking papers in various areas of theoretical computer science that are using analytical, probabilistic or combinatorial methods to the analysis of algorithms. To mention a few: sorting and searching, discrete and combinatorial optimizations, arithmetic algorithms, algorithms and problems on graphs, coding and communications, algorithms on strings including those applied to molecular biology, data compressions, number theory, etc.

Since 1993 we meet regularly during the seminar on the analysis of algorithms. In 2002 the *Eighth International Seminar on Analysis of Algorithms* will take place in Strobl, Austria. A special issue of *Combinatorics, Probability & Computing* is planned to summarize recent work in the analysis of algorithms. The guest editors invite you to submit a paper. Prospective authors should follow the regular guidelines of the journal except that they should send a postscript file electronically to both of the guest editors. The deadline for submission is **December 15, 2002**.

Guest Editors

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