International Conference on Data Engineering (ICDE'05)

I want to draw your attention to the "call for participation" for ICDE'05 that is on the back cover of this issue. ICDE (also called simply the Data Engineering Conference) is sponsored by the IEEE Technical Committee on Data Engineering (TCDE). It is the the flagship conference of the IEEE in the area of database technology. The next Data Engineering Conference is in Tokyo in April, timed to coincide with the cherry blossums. The conference is very selective, ensuring a fine technical program. I encourage you to find out more about the conference at its web site (http://icde2005.is.tsukuba.ac.jp/).

Large technical conferences such as ICDE do not happen by magic. There is always a local committee that does an enormous amount of work so that the conference can run smoothly. There is also a standing committee within the IEEE, called the ICDE Steering Committee, that oversees the process, selects among conference proposals, checks the budgetting, etc. Erich Neuhold is the chair of the ICDE Steering Committee, and can be reached via email at neuhold@ipsi.fhg.de. The Steering Committee is always interested in hearing proposals for conferences in future years.

The Current Issue

Our world is rapidly being transformed by the advances of biotechnology. These advances are the result of the fundamental understanding achived over the past 50 years or so in the area of genetics and DNA sequences. Much of the work involved in this enterprise is pure biology, involving elaborate laboratories and careful biological experimentation.

However, advances in our understanding of the biology of the genes depends in an essential way on computer data processing of sequence information. Indeed, it is the ongoing automation of much of this, exploiting indexing technology and, increasingly, databases as well, that enables the rapid strides that we have grown accustomed to over the past several years. The clear relevance of databases to the genetic sequencing enterprise has triggered substantial work in the database community to respond to this challenge.

The current issue reports on but a sampling of the work going on in our field to respond to the challenge of dealing with genetic sequence data. Progress in making databases deal well with biology is changing the way that biologists do their science. The papers in this issue come from a mix of commercial and academic researchers from widely distributed institutions. This testifies to the great interest that this area has generated. I want to thank Jignesh Patel for the fine job he has done in assembling this issue, which could not be more timely. In a very real sense, the moment for our community to have impact is now. So I would urge you to study this issue of the Bulletin, and consider contributing to the revolution in biology.