

with various field transformation techniques. We have shown that FX distribution methods are perfect optimal for certain types of multiattribute range queries, and strict optimal for a large class of multiattribute range queries. However, there are many cases for which the

existence of perfect optimal distribution is not known. We are currently investigating the existence of optimal distribution for these cases by extending FX distribution methods. This will require the development of more general transformation functions.

7. REFERENCES

1. A. V. Aho and J. D. Ullman, Optimal partial-match retrieval when fields are independently specified. *ACM Transactions on Database Systems* 4 (2), 168–179 (1979).
2. H. C. Du and J. S. Sobolewski, Disk allocation for cartesian product files on multiple-disk systems. *ACM Transactions on Database Systems* 7 (1), 82–101 (1982).
3. A. K. Garg and C. C. Gotlieb, Order-preserving key transformations. *ACM Transactions on Database Systems* 11 (2), 213–234 (1986).
4. S. Khoshafian, P. Valduriez and G. Copeland, Parallel query processing for complex objects. *Proc. International Conference on Data Engineering*, pp. 202–209 (1988).
5. M. H. Kim and S. Pramanik, Optimal file distribution for partial match retrieval. *Proc. ACM SIGMOD Conference*, pp. 173–182 (1988).
6. M. D. Leland and W. D. Roome, The silicon database machine. *Database Machines, Fourth International Workshop*, pp. 169–189 (1985).
7. S. Pramanik, Performance analysis of a database filter search hardware. *IEEE Transactions on Computers* 35 (12), 1077–1082 (1986).
8. S. Pramanik and M. H. Kim, Generalized parallel processing models for database systems. *Proc. International Conference on Parallel Processing*, pp. 1.91–1.94 (1988).
9. S. Pramanik and M. H. Kim, Data distribution problems for parallel processing of multiattribute range queries. Technical Report, Computer Science Department, Michigan State University (1988).
10. S. Y. W. Su, L. H. Nguyen, A. Eman and G. J. Lipovski, The architectural features and implementation techniques of multicell CASSM. *IEEE Transactions on Computers*, 28(6), pp. 430–445 (1979).
11. Y. Y. Sung, Performance analysis of disk modulo allocation method for cartesian product files. *IEEE Transactions on Software Engineering* SE-13 (9), 1018–1026 (1987).

Announcement

Switzerland (near Geneva), 28–30 OCTOBER 1992

Third Eurographics Workshop on Object-Oriented Graphics Call for Contributions

Aims and Scope

At past workshops it has been noted that people in the graphics community are addressing a wide variety of problems: surface modelling, rendering, animation, interaction, multiple media, constraints, etc. At the same time, it has also been noted that people share similar concerns in the areas of software reuse, extensibility and maintenance. This workshop will be an effort to identify such common concerns and to devise solutions that benefit a wide spectrum of research domains within the interactive graphics community. The goal of the workshop is to outline a common platform, based on a set of object-oriented primitives, for the support of graphics applications. To this end, each submission should be motivated by at least one of the following questions:

1. If my programming environment were to provide an object-oriented platform, what kind of support would I ask from it for my particular domain of interest?
2. As a designer of an object-oriented platform, how would it support object-oriented graphics?

Here, the term object-oriented platform should be taken in a broad sense; it may encompass any kind of functionality to support graphics applications, even non-graphic primitives such as support for persistent objects, concurrency,

etc. The following non-exhaustive list provides some typical issues that could be discussed:

- support of reuse and extensibility in graphics systems;
- concurrency and distribution support for graphics applications;
- standards for data exchange such as geometric primitives, scripts, sound and video;
- the integration of constraints in graphics systems;
- the binding of input/output activities to objects and user interaction;
- encapsulation as a mechanism for interoperability of graphics applications;
- object-oriented 'wrapping' of existing graphics functions.

Full Papers

Please submit 4 copies of a paper (10–20 single-sided pages, 200 word abstract) for review by the programme committee. Accepted papers will be reproduced in the workshop proceedings. Invitations to submit revised versions for a book (in the Eurographic Seminars Series of Springer) will depend on the quality of the contributions. Shorter position papers (1–2 pages) may be accepted according to their relevance to the workshop. Questions concerning the suitability of papers should be addressed to the organizers.

Workshop Format

The workshop will be limited to 60 participants. To encourage discussion, at least two types of presentations are foreseen: 1) full paper presentations and 2) presentations of

results from small group discussions. Equipment for document and transparency preparation will be made available. The results of the workshop may also be reproduced in the book if the participants and editors feel they are appropriate.

Schedule

31 May 1992	Deadline for paper submission
15 August 1992	Notification of acceptance of papers
28–30 October 1992	Workshop
15 January 1993	Deadline for revised papers

Venue and Fee

The workshop will be held in Switzerland. The fee will be about SFr. 700 including accommodation and meals. Limited funds for subsidizing students may be available.

Organization

The workshop is organized by Vicki de Mey and Xavier Pintado of the Centre Universitaire d'Informatique (University of Geneva) and promoted by Eurographics. The book will be edited by Wm Leler of Ithaca Software, Vicki de Mey and Xavier Pintado.

Address

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