

# Research Exhibits by Saitama University

An Abstract Submitted  
to Research Exhibits of SC'94

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## 1 Purpose of the research exhibits

Saitama University has a high performance computer (Hitachi S-820) and usual workstations (HP, SPARC etc) linked by networks (FDDI and CATV). A high performance computer and networked workstations are expected to give the excellent environment of supercomputing which is applied in the field of engineering research and educations. Analog video line (CATV network) is expected to give the multimedia features to the present computing and networking environment. The purpose of the present research exhibits is to introduce the activities of Saitama University and to communicate with other universities' exhibits.

## 2 Contents of research exhibits

The actual items to be exhibited are (a) supercomputing for researches (b) supercomputing for educations in the university (c) supercomputing for educations in K-12 programs (d) networking for supercomputing and multimedia. A high performance computer and parallel computers by PVM are mainly used in the field of engineering research, those are, plasma engineering and nuclear fusion studies, civil engineering and material sciences. A CD-ROM will be published to introduce the above activities.

## 3 Environment for exhibits

The actual exhibitions are displayed by the typical workstations (HP and SPARC) and video posters. An original CD-ROM is shown by these workstations. The workstations for exhibits are prepared by the university. Several PCs (Macs and Windows) are also carried from Japan by the staffs of the university.

## 4 Networks

The usual TCP/IP networks is required for the exhibition environment. The analog video line cooperating with the computing facilities is set by the university to demonstrate the CATV features.

## 5 Summary

The present computing environment in Saitama University is very popular and usual one, which is currently being used in the field of research and educations. The ideas how to use the present facilities for the actual research and educations are meaningful to be exhibited. The experiences of applications of parallel computing are also fruitful to demonstrate. An original CD-ROM is distributed at the exhibits.