**Effective Real Time Tracking System using Stereo Vision**

Hyun-Jin Lee, Tae-Young Kuc  
(SungKyungKwan Univ.)

Recently, research of visual control is getting more essential in robotic application, and acquiring 3D informations from the 2D images is becoming more important with development of vision system. For this application, we propose the effective way of controlling stereo vision tracking system for target tracking and calculating distance between target and camera. In this paper we address improved controller using dual-loop visual servo which is more effective compared with using single-loop visual servo for stereo vision tracking system. The speed and the accuracy for realizing a real time tracking are important. However, the vision processing speed is too slow to track object in real time by using only vision feedback data. So we use another feedback data from controller parts which offer state feedback ……

**Research of Home Application Model for Implementation of Home Automation Server**

Kim Yu Chul, Kim Hyo Sup, Lee Guhn Song, Cho Young Jo  
(I Controls)

This paper presents an application model for home automation control. In this work, we propose home application scenarios that are suitable for the home life style and design a control structure integrating various home automation functions, such as lightning, heating, cooling, security, fire protection, telemetering, entertainment and communication. State-of-the-art wired/wireless home networks such as Bluetooth, LonWorks, IEEE1394 and PLC(Power Line Communication) are included in the control structure.

**Development of a Web Accelerator in the Kernel**

Park Jonggyu, Lim Hanna, Kim Hagbae  
(Yonsei Univ.)

In this paper, we suggest a kernel level muti thread web accelerator (called the SCALA-AX), which significantly improves the performance of the web server. In comparison with a conventional proxy web cache that is generally called a caching server and a simple content-copy based system, the primary functions and goals of SCALA-AX are designed to maximize the content services of a front-end web server with high performance. Specifically, the SCALA-AX runs on the kernel level of a web server, based on the newest caching techniques. Moreover, the SCALA-AX supports the http 1.1 protocol and allows the dynamic pages as well as static pages to be processed.

**Implementation of Internet Based Control by Developing LonWorks Intelligent Control Modules**

W.P.Hong (Hanbat Univ.) W.G.Park (DCI.Co.,LTD)

This paper proposes a new Internet based control concept & design method and implementation of LonWorks network system for remote intelligent control. The experimental network system using iLON Web server is designed and fabricated. It is also verified that the developed control modules with LonTalk protocol have available, interoperable, and reliable performance characteristics from the experimental results. Especially, the results provide a available technical data for remote home, building & plant automation control.

**A Study on the Development of the Internet Live-Broadcasting Server System**

Lee Sangmoon, Min Byungseok, Kim Hagbae (Yonsei Univ.) Kang Sinjun (ACS Technology)

Advances of the computer system and the high-speed network have made it possible to popularize the multimedia services among various applications in the internet. In addition, the number of the users and the kinds of multimedia services have been increasing day by day. Thus, this paper presents an internet live-broadcasting server system to accelerate these trends. The developed system facilitates creating or joining the broadcasting with just such basic components as PC camera and sound card. Also, it guarantees the scalability that the channels could be dynamically expanded as the population of users rapidly increases. The clustered streaming servers are generically managed by the CSM …

**A Novel Design of the Distributed Fire Alarm Control System by Developing Intelligent Control Modules with LonTalk Protocol**

Won Pyo Hong, Sung Hoan Goo (Hanbat Univ.)  
Won Guk Park (DCI.Co.,LTD)

There are many economic and operational reasons to integrate fire alarm signaling system with other building automation system. Integration of this requires communication standard and careful design practices. The important point for this is also the development of intelligent control modules for replacing the conventional zone adapter in fire system. Therefore, this paper proposes a new conceptual design of the distributed fire alarm signaling system and a new intelligent control modules with LonTalk Protocol. Newly proposed additions to LonWorks network make it very well suited for integration fire systems with other building automation systems. Additionally, it is very important that best design practices……