

ISCAS '84

Circuits and Systems in Robotics
 Introductory Comments
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At the 1983 ISCAS the CAS AdCom gave the go-ahead for more participation in activities in the robotics area. This session, "Circuits and Systems in Robotics," is a direct outgrowth of that encouragement. In particular it has the purpose of setting up a forum for presentation of research topics and results of interest to the CAS membership, as well as for discussions on the directions the Society should move in the area.

As spelled out in President Laker's report [1], since the time of the 1983 ISCAS, the CAS Society has joined in the formation of the IEEE Robotics and Automation Council which had its first meeting December 13, 1983, in San Antonio, TX. A report on the Council's activities will appear in the June, 1984, issue of the IEEE Circuits and Systems Magazine, but of possible immediate interest is the creation of the Journal on Robotics and Automation with Dr. George Bekey as Editor (address: Electrical Engineering Department, USC, Los Angeles, CA 90007). This Journal is aiming for January, 1985, publication.

Likewise the CAS Society has set up a Robotics Technical Committee which is working to coordinate and establish activities within the Society. More information on this will be available after ISCAS'84 itself, but participation in the Committee is being especially sought by colleagues in industry.

Although apparently a number of electrical engineering professorial educators feel that robotics is a fad [2], the facts seem to indicate otherwise:

investments by governments and industry with extensive and increasing use by industry indicate the future is of enduring importance for robots. Since it has been the microprocessor with its IC base and the extensive use of CAD/CAM in robot operations which have made robots of considerable practical importance, and since these are primary interest areas to the CAS Society, a number of us feel the area of robotics could be one of considerable profit for the Society to pursue. There are very interesting technical (as well as societal) problems at all levels of sophistication and ones which involve both theory and practice to almost any desired degree. Among the many areas of possibly considerable interest to CAS members could be those involving sensors, signal and data processing, artificial intelligence systems and circuits, specialized VLSI designs for end effector control, and circuits for emulating biological neural activities [3]. Hopefully this session will bring out many worthwhile topics and activities in which interested CAS members can participate.

References

- [1]. K. Laker, "President's Report," IEEE Circuits and Systems Magazine, Vol. 5, No. 4, December 1983, p.3.
- [2]. Editorial, the Diamondback, University of Maryland, September 26, 1983, p. 4.
- [3]. Neural-Type Robotics, session at the 26th Midwest Symposium on Circuits and Systems, Puebla, Mexico, August 1983, see the Proceedings, pp. 48 - 73.



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