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IEEE Control Systems Magazine (ISSN 0272-1708) is published bi-monthly by The Institute of Electrical and Electronics Engineers, Inc. **Headquarters:** 345 East 47th Street, New York, NY 10017-2394, 212-705-7900. Responsibility for the contents rests upon the authors and not upon the IEEE, the Society, or its members. Individual copies: IEEE members \$10.00 (first copy only), nonmembers \$20.00 per copy; \$4.00 per member per year (included in Society fee) for each member of the IEEE Control Systems Society. Member and nonmember subscription prices available on request. **Copyright and Reprint Permissions:** Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limits of the U.S. Copyright law for private use of patrons: 1) those post-1977 articles that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01970; and 2) pre-1978 articles without fee. For other copying, reprint, or republication permission, write to: Copyrights and Permissions Department, IEEE Service Center, 445 Hoes Lane, Piscataway NJ 08855-1331. Copyright © 1995 by The Institute of Electrical and Electronics Engineers, Inc. All rights reserved. Second-class postage paid at New York, NY and at additional mailing offices. **Postmaster:** Send address changes to IEEE Control Systems Magazine, IEEE, 445 Hoes Lane, P.O. Box 1331, Piscataway, NJ 08855-1331.

Printed in U.S.A.

**FROM THE EDITOR**

My thoughts lately are on what control theory has done to improve the quality of my life. Along these lines, and appropriately for the season, I'm wondering what particular "emerging" control technologies can impact my Christmas wish list? Lo and behold, I've run across some possible gift items.

Recently one of my students found an ad for the "thinking man's shaver that thinks on its own." Hmmm. I wondered what control technology was being utilized here to improve the quality of my life.

You guessed it: fuzzy logic was the "elaborate artificial intelligence system" which allowed this mere shaver to learn how to give me the best possible shave. Reading on in the ad, I was astounded to learn that this shaver senses the length, thickness, and density of my beard (every 0.4 seconds ... wow), so that the "fuzzy logic circuit board" could continually narrow down to the one pattern (from hundreds) that best fits my facial and beard condition at that moment. What really drew me in was the LCD graphic display, right there on the shaver's handle, that shows me the "amount of power the fuzzy logic is delivering" (does your shaver have an LCD display?). The bottom line said "\$249.95," which may be quite a bargain for such an advanced product. After a minute of reflection, however, I realized that I hadn't spent that much on shaving in my entire life.

Here's another possibility. While Global Positioning Systems (GPS) will likely be extremely important in control systems for future automated vehicles, there are, as most of us know, other critical applications of GPS for improving the quality of our lives. A few days ago a colleague working with intelligent vehicle highway systems handed me an announcement for another product that I don't think I can live without. In test marketing right now is a GPS-based automated golf yardage system designed to provide accurate yardage from anywhere on the course. GPS receivers are mounted on golf carts, and determine position of my golf ball (measurement corrected through local radio differential signals), displaying the length of my drive, distance to hazards, and actual flagstick location (pin placement). Would it improve my score? Perhaps that's a side issue; at the very least it would keep my mind off my awful golf swing.

**In this issue**

So there you have it: two ideas for emerging technology stocking stuffers. Surely there are many more. In fact, for the second consecutive year, we present this special issue on Emerging Technologies. Marc Bodson once again helped me put this issue together, and my thanks go out to him and the reviewers for their efforts. Although there is no mention of fuzzy shavers or GPS golf aids, we hope you will find the issue useful for tutorial views on some other important emerging technologies which certainly affect the quality of our lives.

The rest is up to Santa.

Steve Yurkovich  
Editor

**ON THE COVER**

Emerging technologies may release endless possibilities for today's control engineers. Cover image copyright Jean-Francois Podevin/The Image Bank.