needs. I then went back into CiSE history and met with George Cybenko, the magazine's first editor in chief, to drill even deeper into the experience lode.

Starting from this point of inherited wisdom, I'm prepared to apply my own experience and imagination to the task of carrying CiSE to the next level in service to our mission, which is briefly:

“… supporting and promoting the emerging discipline of computational science and engineering, and fostering the use of computers and computational techniques in scientific research and education … among physical scientists, engineers, mathematicians, and others who would benefit from computational methodologies.”

If I’ve drawn any lesson from the information technology culture over the past few decades, it is that nothing stays the same: things either evolve or disappear. During the six years since its birth from the merger of the American Institute of Physics’ Computers in Physics and the IEEE Computer Society’s Computational Science and Engineering, CiSE has served thousands of scientists and engineers. Many are in computational fields, but many are not. In fact, it is precisely because the magazine serves two communities—computational scientists/engineers and scientists/engineers who use computation—that the merger of these two publications to form CiSE was so propitious. Our niche is at this intersection and, with our help, both groups stand to improve their respective abilities and products by learning from each other.

How fully have we realized our promise? How might CiSE evolve to stimulate and support this synergy? These are the questions I am committed to addressing. One key to this task is to examine the degree to which our content and approach respect our mission and serve our community. Another is to closely follow developments in those realms of computing that relate to our professional work.

Both computational science and the use of computer technology in science and engineering are rapidly expanding in variety, sophistication, and power. As global climate modelers, experimental bench scientists, industrial engineers, college instructors, and various combinations of these, we depend more deeply on computing than ever before. As the landscape of the scientific and engineering computing world changes, CiSE must evolve by widening its scope and shifting its focus to follow current trends.

What to do, then? Three components describe the shape of my vision: community, content, and approach. Despite differences in fields of expertise, manners of employing computation in our work, and locations on the research and teaching continuum, our broad community is bound by computation. We all stand to gain much from awareness and understanding of what others do and how they do it across this landscape. As more kinds of scientific and engineering problems become accessible to computational techniques, and as the interconnectedness of science and engineering practice and instruction grows, I see a need for CiSE to become a forum for building a community that transcends our differences.

Our content must include those developments in computing machinery, systems, and methodologies that have the greatest implications for science and engineering, and those computing applications that best illustrate how these practitioners use computing power. The most exciting and productive areas of science and engineering these days are those that are “interdisciplinary” in the broadest sense—across expertise, scale, and role in the sci-
My Vision? Now It’s Your Turn …

In the main text, I’ve stressed CiSE’s responsibility to articulate connections between computational science/engineering and engineering/science that uses some computation.

During the past few years, we’ve given a high profile to high-performance computing and the associated computational sciences, but now we must reassert our commitment to helping the full spectrum of scientists, engineers, and educators who use computers to work across their differences toward common goals. I ask all those reading this essay who recognize that CiSE has the potential to improve their professional lives to add their voices now by telling us how to realize this potential.

Email your comments, suggestions, or ideas to me at CiSE-Editor@aip.org.

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