The Bellarmine College of Liberal Arts
The College of Science and Engineering &
The First Year Institute present:

The HAL 9000 computer and the vision of "2001: HAL's Legacy"

David Stork, Ph.D. Stanford
Tuesday 8pm, October 30, 2001
Seaver Hall 100

"I am a HAL 9000 computer production number 3. I became operational at the HAL Laboratories in Urbana, Illinois on January 12, 1997..."

--Arthur C. Clarke **2001: A Space Odyssey** (1968 novel)

Where is HAL 9000?

Can computers: feel reason Speak procrastinate

This non-technical talk is profusely illustrated with clips from "2001" and current research and sheds new light on key moments of the film. You will never see the film the same way again.

DAVID G. STORK is Chief Scientist at Ricoh Innovations and Consulting Associate Professor of Electrical Engineering and Computer Science at Stanford University. A graduate of MIT and the University of Maryland, Dr. Stork sits on the editorial boards of five international journals, has published numerous papers on machine learning, pattern recognition, neural networks and related topics, and holds 15 patents. His documentary film "2001: HAL's Legacy," based on his book **HAL's Legacy: 2001's computer as dream and reality** (MIT Press), will air on PBS television on Tuesday, November 27 at 9pm.

2001 essay prompts:

1. David Stork claims that 2001 presents three stages in the evolution of intelligence:
    a. warlike (monkeys, missiles)
    b. logical (Hal)
    c. ideal (the aliens who sent the monolith, the star child)

This vision suggests that the current stages of human evolution, the first two, are hazardous to our health or insufficient to our survival as a species. How does this view of humanity grow out of our use of technology? Are there ways we can change our approach to technology that is both more ethical and more evolved?

2. In David Stork's talk, he spoke about the difficulties of programming computers with even basic human skills. Higher level skills we typically esteem, such as playing chess, are much easier to program than simple skills, such as face or voice recognition. What assumptions about intelligence did the researchers in artificial intelligence make? Do these assumptions suggest biases? How might the findings Stork described change our view of human intelligence in general?

3. David Stork discussed several predictions in technology that were made in the movie; voice recognition, speech generation, graphics, speech reading, etc. Research an advancement in technology that scientists are currently developing. Summarize the state of the art, briefly describe the how it is achieved, and comment on potential applications. Are there any foreseeable problems with the use of this technology, such as, a person's right to privacy?