Office of the President
226 Tigert Hall
PO Box 113150
Gainesville, FL 32611
April 18, 2012

Dear President Machen:

We are writing to express our concern about the recent news that the University of
Florida plans to restructure its CISE department in a way that eliminates graduate studies
and research in computer science.   We understand the very significant economic
pressures facing public universities today, and we realize each university must make
difficult decisions about how to manage its resources.   We also realize that we may not
be cognizant of all the details behind the decision. But as board members of the
Computing Research Association, we feel it essential to share with you the reasons we
view this proposal with puzzlement and concern.

First, and most importantly, you have a strong computer science program at Florida.
Your faculty members include Fellows of the ACM and the IEEE, the leading
professional organizations in the field. Your faculty compete successfully for NSF grant
funding. Your faculty include individuals with international reputations in their
respective subdisciplines. While we all view rankings with appropriate skepticism, it is
also worth noting that US News and World Report ranks your department in the top 40
nationally.

If you dismantle the research and graduate teaching components of the CISE department,
you will almost certainly lose your strongest faculty members, and you will definitely
lose your stature in this critical field.   And that's important for multiple reasons.   Not
only will you lose the ability to compete for a significant amount of research funding in
computer science proper, but you will also be at a huge disadvantage in competing for
funding across a range of other areas that require the computing expertise. As you know,
problems in engineering and science, including social science, increasingly require
interdisciplinary strengths, and in a vast number of cases, that includes computational
expertise.   Consider that fully eight of the fourteen Grand Challenge problems
highlighted by the National Academy of Engineering require computer science as a key
element of the research necessary for advancement. Without a strong computing group,
you will not be positioned for research in, e.g., securing cyberspace, advancing
personalized learning, engineering the tools for scientific discovery, advancing health
informatics, engineering better medicines enhancing virtual reality, preventing nuclear
terror or reverse-engineering the brain. This is a subset, the list of problems requiring
core computer science is extensive; indeed, it is difficult to find difficult national priority
problems which do not involve computer science in a fundamental way.

As one additional concrete example, consider the recently announced Big Data Initiative (http://www.whitehouse.gov/sites/default/files/microsites/ostp/big_data_press_release_final_2.pdf) with computer science as the core for a broad spectrum of fundamental research activities. Without high quality computer science researchers, research in big data and the mechanisms by which it continues to change how we work, play, do business and conduct research is closed off to University of Florida researchers.

Computer science is a key driver of the nation's economy, and is critical to many national priorities, notably including national security, healthcare, and energy. With a weak computer science program, the University of Florida will be unable to contribute fully to advancing these national goals.

As members of the academy, we appreciate and support the argument that a strong research program actually results in a strong undergraduate program; the ability to bring research into the classroom to excite students about the field creates a stronger rather than weaker undergraduate program. Without strong research programs, undergraduate research becomes undergraduate projects. And it is well known how valuable an undergraduate research experience is in a student's experience and career.

Finally, it is worth pointing out that in the current fragile economy, there are very few college degrees that are as likely to lead to good, high-paying jobs as degrees in computer science. This is true at the bachelor's, master's and Ph.D. degree levels. A strong computer science department will attract strong students who will go on to make a difference. A weakened computer science department will be seen as less prestigious by the very students who can do the most to re-invigorate the state's economy after they graduate.

For all these reasons, we seriously question the decision to restructure the CISE department.

Very respectfully yours,

Eric Grimson
CRA Board Chair