April 4, 2006

Dear Professor Dongarra:

I am writing to endorse the Interdisciplinary Graduate Minor in Computational Science. (IGMCS). The School of Information Sciences will be able to enhance its already interdisciplinary program with such a graduate minor. For example, we would use the IGMCS to advance two tracks of IS studies: 1) Human Computer Interaction (HCI); and 2) Knowledge Mining.

The HCI track will focus on the human and social dimensions of computer system design and use with two strands of emphasis: (1) the novel interaction between people and computers beyond conventional desktop computing; and (2) the role that computer systems can play in collaborative work between individuals, groups, and organizations. Topics would include, adoption and diffusion of collaborative technologies; software architectures for user-adaptive systems; universal access to interactive systems; design principles for information visualization; and new patterns of computer-mediated work such as virtual teams.

The Knowledge Mining (KM) track would address the severe information overload in science and technology caused by the rapid growth of computer-based information systems and their global interconnectivity. This problem is accelerating with the expansion of the internet and related technologies. The IGMCS would allow IS to develop a KM track that concentrates on the methods and tools for assisting scientists, researchers and other professionals in the effective extraction of problem-oriented knowledge from diverse and massive information sources, and for using this knowledge in problem solving situations. Emphasis will be given to novel and creative methodologies that generate knowledge through inference from data and information, and present the generated knowledge in user-oriented forms.

The IGMCS proposal presents excellent opportunities for many disciplines and we look forward to its adoption.

Yours truly,

Ed Cortez, PhD
Director & Professor