

December 12, 2011

The Board of Regents
The University of Hawaii System
2444 Dole Street, Bachman Hall, Rm. 209
Honolulu, HI 96822

SUBJECT: Support letter for the Ph.D. Program in Information and Computer Sciences

Dear UH Board of Regents:

As the Executive Director of the High Technology Development Corporation (HTDC), I write today to show my enthusiastic support for updating the Information and Computer Sciences (ICS) Ph.D. Program at UH Manoa from provisional to the established status.

HTDC is the lead agency in the State of Hawaii tasked with tech-based economic development (TBED) and as such, we are dedicated to improving the growth of the technology and the innovation industry sectors in Hawaii. To that end, UH and HTDC have overlapping goals. National think-tanks, federal agencies, and economic development specialists internationally have recognized the important roles research and educational institutions play in regional economies. The State Science and Technology Institute, a national umbrella organization for TBED entities, even identified universities as drivers for economic development in their resource guide commissioned by the U.S. Dept. of Commerce's Economic Development Administration.

There are numerous reasons why a bona fide Ph.D. program is needed at UH. Here are three points that affect our mutual missions for your consideration:

1. Alignment with the State of Hawaii economic development goal

Our traditional industry sectors can no longer support the level of economic growth the State needs to sustain the quality of life we have come to expect. A prospering innovation economy is crucial to augment our industries, and UH's declaration to upgrade the Ph.D. program in ICS from provisional to established is well-aligned with the needs of our State. If we aim to grow the innovation sectors of our economy, we must rely on UH to produce more graduates in computer science and related disciplines at all levels for that growth in the private sector. There is a crucial, demonstrable need in local industry for more qualified graduates in the field of computer science and software engineering. This need was further emphasized by the strong interest in addressing this gap at the Software Development Skills Panel, a forum organized by HTDC and the Workforce Development Council in conjunction with UH in 2011.

2. Attraction of top professors and retention of top students here on the islands

In order to produce more top-notch computer science students, we need to attract and retain top-notch professors and graduate students. Without the Ph.D. standing for the program, the department's desire for excellence will be undermined. The attraction and retention of top professors and students are important factors for growth of the local businesses, as "shipping in talent" from the mainland or abroad is prohibitive to them (cultural adjustment and other issues result in shorter tenure and below average results) Further, having a reputation for a solid Ph.D. program in ICS is considered a strong indicator for business attraction. Many established companies when considering building an additional "campus" look at both the quality and the number of graduates associated with the local university.

3. ICS is now an established field

It is hard to imagine for the flagship school for the Pacific Islands as a land-grant university not to have a Ph.D. program in what has now become an established field. Further, ICS nationally and internationally is a growing field, affecting the technological development of non-computer science fields. This growth is mainly due to its interdisciplinary nature and the need for many other disciplines to effectively process data and the move to convert human transactions to electronic transactions (e.g., renewable energy, biometrics, astrophysics, financial forensics, e-commerce, user-interface, online education). The established status for ICS Ph.D. would not simply serve the computer science arena but also other disciplines now reliant on various aspects of computer science, both on and off campus. Ph.D. graduates are no longer just needed for the technology companies but in finance, engineering, health care and other disciplines. UH's research funding has grown tremendously in the last decade. With more federal and foundation funding available for ICS-related disciplines, giving ICS the established Ph.D. status is also in line with President Greenwood's vision and leadership for UH to double its research funding. Such a bold goal is important for the industry because we rely on the university as the engine of innovation. ICS being considered more of an applied field of science, there are more opportunities for technology transfer and commercialization of their research findings to be adopted by the industry, forging UH's role as part of the economic driver for the State of Hawaii.

I have personally interacted with many of the devoted professors and students in the ICS program, who have willingly given their time to reach out outside of their own program to improve the quality of education for UH and to contribute back to its community as a whole. I hope the UH Board of Regents will share my strong support to give the ICS program the recognition it deserves by declaring its established status.

Sincerely,

Yuka Nagashima
Executive Director and CEO