Efficacy Study of the RE for yoU Site for Graphics Research

Joan Peckham Department of Computer Science and Statistics

Project Summary

1. Overview of Project, 2. Participant Recruitment & 3. Diversity of Participants

Funded by a grant from the National Science Foundation (NSF), Research Experiences for Undergraduates (REU) program, an REU Site is to be established titled: *RE for yoU, An REU Site for Graphics Research in Rhode Island*. This REU Site will support active research participation by undergraduate students to help develop a diverse, internationally competitive, and globally engaged scientific and engineering workforce in the field of computer graphics and art. To this end it draws on the integration of research and education to attract a diversified pool of talented students from Rhode Island into careers in science and engineering and to help ensure that they receive the best education possible.

RE for yoU projects will involve Rhode Island undergraduate students in meaningful ways in several ongoing research programs in digital graphics and art. RE for yoU projects will feature high quality interaction of students with faculty and/or other research mentors and access to appropriate facilities and professional development modalities. We hope to attract talented undergraduates who might not be expected to continue past their baccalaureate and retain them in careers in science and engineering, including careers in teaching. We also hope to increase the participation in research of women, underrepresented minorities, and persons with disabilities.

In order to assess the efficacy of our efforts in achieving the above stated goals, we propose to survey each cohort of 10 students when they enter the program and as they complete their research experience. We would further like to briefly survey these individuals with an online instrument at yearly intervals in order to assess their retention in the field, continuance of their careers and reflections on their RE for yoU experience. The paper-based survey instruments are attached to this proposal, as well as the consent form that will be used. The digitized online survey for follow-up has not been developed at this time, but it is expected to not exceed five fields of information.

4. Nature of Participation

The survey instruments and consent forms will be distributed by the Principal Investigator (PI) at an orientation meeting and again at a wrap-up meeting to be held each semester at either of the URI Campuses (Kingston or Providence).

5. Confidentiality/Anonymity

Only personnel who have passed the Human Subject Test: http://www.uri.edu/research/compliance/Tutorial-Exam/exam.htm or equivalent will administer surveys or be allowed access to the secure database in which all survey data will be stored. Reporting of survey results will generally be as aggregated data. Any response exemplar that could potentially be individually identifiable will be reported only after first obtaining an expressed written consent from that individual. Signed consent forms, survey documents and digitally archived data will be kept in a secure location for the requisite time of ten years.

6. Potential Harms

The researchers do not anticipate any harm to accrue to the participants by completing the two paper-based surveys, other than the time commitment, which will be compensated as a function of their paid internship status. The first survey should take about five minutes to complete and the second survey should take about twenty minutes to complete because of its analytical nature. The third online survey should take less than a minute to complete.

7. Potential Benefits

The potential benefits of this project are twofold:

- 1) the participants will be given an opportunity to reflect on their experiences in the RE for yoU program, and
- 2) the efficacy of the program in meeting its stated goals will be evaluated for reporting to the funding agency and the general community.

Acknowledgement is given to Professor Lisa L. Harlow for the questionnaire format.