Application for CS Academy @ Perkins

July 26 – August 7, 2015

in partnership with the

Rochester Institute of Technology (RIT)

CS Academy is intended to provide high school students with visual impairments an opportunity to learn about Computer Science in:

* a 13-day summer academy at Perkins School for the Blind
* a follow-up online component for additional computing topics and collaboration

that will enable them to further explore computing, create projects and share them in an accessible manner. The curriculum is derived from the Exploring Computer Science (ECS) curriculum, which is used in dozens of high school around the US. It will be enhanced to enable students with visual impairments to develop their abilities in web design programming, and robotics.

Return all items on the application checklist to the following address:

J. Patrick Ryan

Supervisor of Outreach Short Courses

Perkins School for the Blind

175 N. Beacon St.

Watertown Ma. 02472

**To receive full consideration, applications are due June 1, 2015. Applications received after June 1, 2015 will be reviewed as space in the program permits.**

APPLICATION CHECKLIST

* Applicant Information Sheet
* Short Answer Questions
* Official transcript for all high school classes\*
* A letter of recommendation from a teacher\* (email is ok)
* Assent Form (Child) AND Consent Form (Parent)

\* May be sent directly via the counseling office or person writing recommendation – does not need to be included in package submitted by applicant.

Questions regarding this application may be directed to Patrick Ryan at (617) 972-7812 or reached by e-mail at Patrick.Ryan@perkins.org.

CS Academy

APPLICANT INFORMATION (Please type responses)

Applicant’s name (First Last):

Street Address:

City, State, Zip:

Phone number:

Birth Date (Month, Day, Year):

Gender: Female Male

E-mail address (please print or type CLEARLY):

(NOTE – ALL APPLICANTS MUST HAVE AND USE AN E-MAIL ADDRESS IN ORDER TO BE CONSIDERED FOR THIS PROGRAM. ALL COMMUNICATION WITH APPLICANTS WILL BE VIA E-MAIL.)

School Name:

Grade (as of Fall 2015):

CS Academy

SHORT ANSWER QUESTIONS

For each of the questions below, feel free to use extra sheets of paper as necessary.

1. Please describe any extracurricular activities you have been involved in:

2. Have you completed any technology or computer science courses in middle or high school? If so, which ones?

3. Have you participated in any technology or computer-related clubs? If so, which ones?

4a. If you HAVE completed technology or computer science courses or participated in clubs, please describe what you did and what you learned.

4b. If you HAVE NOT participated in technology or computer science clubs or classes, what interests you about the CS Academy?

5. Is there any other information you would like to provide (use separate page if necessary)?

6. Do you have any particular goals or expectations for what you would like to learn from the CS Academy?

CS Academy

**ROCHESTER INSTITUTE OF TECHNOLOGY**

**ASSENT FORM (CHILD)**

Project Title: **I-ECS: Inclusive Exploring CS Curriculum Enhancement as Face-to-Face and Online Support for Visually Impaired, High School Students**

Investigators:

Stephanie Ludi Professor, Dept. of Software Engineering

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Karen Mutch-Jones Co-Director of TERC’s Evaluation Group

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We are doing a research study about improving access to Computer Science through a set of online and face-to-face activities (and supporting software).  A research study is a way to learn more about people. If you decide that you want to be part of this study, you will be asked to use and offer feedback (including your preferences) on the Exploring Computer Science tools themselves, the content, and your experiences in using the system. A residential camp (CS Academy) will introduce you to the tools, the cohort of students and the research team. Modules with require specific equipment, such as the Robotics Module, will be part of the CS Academy, to be held at the Perkins School for the Blind. During the CS Academy, participants will meet for approximately 6 hours per day for about 2 weeks. You will be able to ask questions and explore the tools during CS Academy. As part of the study, you will be asked what works well in terms of your preferences of use, what you do not prefer, and how to improve CS Academy and the I-ECS tools (and content). Your feedback will be instrumental as we move forward with the overall project. You will be videotaped and photographed to help document the interaction with the tools and the overall CS Academy experience. After the on-site camp, you will be asked to give feedback on additional, online content and tools through our I-ECS site. You can work on related projects individually or with others in the group. You will be asked to provide feedback on the online system as well, in a similar manner as during the summer camp. You can work at your own pace at home, but the estimated time that you would participate online would be about 2-4 hours per week during the Fall and early Winter.

There are some things about this study you should know.  These are your privacy, your time, and if you get frustrated. Privacy may be a concern because you will sometimes need to log in to an online system to access I-ECS tools and content, and you will be responding to occasional questions that ask for your feedback during the use of the system. Your responses, including uploaded materials will be recorded/stored by the online system as you use the system. We want to you’re your identify secret, so you will be assigned an ID code. If you do accidently put your name or other identifying information on a project, the team will remove any such identifying information that is found or brought to our attention. After the CS Academy, you will be asked to access the I-ECS site that has additional content for you to use to explore Computer Science topics. It is estimated that you would spend about 2-4 hours per week doing this but you can work at your own pace. In addition, if you become frustrated or fatigued during your participation, you can ask for help or stop at any time.

Not everyone who takes part in this study will benefit.  A benefit means that something good happens to you.  We think these benefits might be that you will learn about Computer Science topics through online and desktop technologies that are accessible to high school students who are visually impaired. Also, you may meet new friends who share common interests, and you can work together online to create interesting things (such as web pages, robots, and programs).

When we are finished with this study we will write a report about what was learned.  This report will not include your name or that you were in the study.

You do not have to be in this study if you do not want to be.  If you decide to stop after we begin, that’s okay too.  Your parents know about the study too. If you have any questions about the form, contact Stephanie Ludi at 585-475-7407 or salvse@rit.edu

If you decide you want to be in this study, please sign your name and keep a copy for yourself.

I, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, want to be in this research study.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_              \_\_\_\_\_\_\_\_\_  
               (Sign your name here)               (Date)

**ROCHESTER INSTITUTE OF TECHNOLOGY**

**CONSENT FORM (PARENT)**

**I-ECS: Inclusive Exploring CS Curriculum Enhancement as Face-to-Face and Online Support for Visually Impaired, High School Students**

**RESEARCHERS**

Stephanie Ludi Professor, Dept. of Software Engineering

(585) 475-7407 [salvse@rit.edu](mailto:salvse@rit.edu)

Debra Bernstein Senior Researcher, TERC

[debra\_bernstein@terc.edu](mailto:debra_bernstein@terc.edu" \t "_blank)

Karen Mutch-Jones Co-Director of TERC’s Evaluation Group

karen\_mutch-jones@terc.edu

**RESEARCHER’S STATEMENT**

We are asking that you and your child be in a research study. The purpose of this consent form is to give you the information you will need to help you decide whether to be in the study or not. Please read the form carefully. You may ask questions about the purpose of the research, what we would ask you to do, the possible risks and benefits, your rights as a volunteer, and anything else about the research or this form that is not clear. When we have answered all your questions, you can decide if you want to be in the study or not. This process is called “informed consent.” Please keep a signed copy of this form for your records.

**PURPOSE OF THE STUDY**

We are testing modifications to the Exploring CS (ECS) curriculum that will make it accessible to visually impaired students. As such, new online resources and tools have been developed to support the ease of access. The goal of the project is to increase access to the ECS Curriculum for visually impaired high school students. We will do this through the development of lesson accommodations, software tools and online modules that students can access as part of the CS Academy and at home. Ultimately educators and the ECS researchers will benefit from the findings in order to make the overall ECS experience more accessible to students.

**STUDY PROCEDURES**

If you choose to be in this study, we will ask your child use the tools and offer feedback and preferences on the tools themselves, the content, and your experiences in using the system. A 2-week residential camp (CS Academy) will introduce your child to the tools, a cohort of peers and the research team. Modules with require specific equipment, such as the Robotics Module, will be part of the CS Academy, to be held at the Perkins. During the CS Academy, participants will meet for approximately 6 hours per day for 2 weeks. Your child will be able to ask questions and explore the tools during CS Academy. As part of the study, your child will be asked what works well in terms of their preferences of use, what they did and do not prefer, and how to improve CS Academy and the I-ECS tools (and content). Your child’s feedback will be instrumental as we move forward with the overall project. Your child may be videotaped and photographed to help document the interaction with the tools and the overall CS Academy experience.

In addition, you will be asked about your impressions of their experience before and after the CS Academy. Anonymity is preserved for the study. Participation is completely voluntary. Your child will be compensated in terms of paid travel and lodging for the CS Academy.

**RISKS, STRESS, OR DISCOMFORT**

Privacy may be a concern because your child will sometimes need to log in to an online system to access I-ECS tools and content, and he/she will be responding to occasional questions that ask for feedback during the use of the system. Your child’s responses, including uploaded materials will be recorded/stored by the online system. Your child will be assigned an ID to preserve his/her privacy and your child should not write his/her name in their responses. If he/she does so accidently, the team will remove any such identifying information that is found or brought to our attention. Your child’s identify will not be recorded other than as a code-name that he/she selects. Your child’s name will not be associated with his/her feedback, as the signed consent forms will be stored separately from the feedback. In addition, if your child becomes frustrated or fatigued during his/her participation, he/she can stop at any time.

For parental surveys, an ID will also be used to preserve anonymity as well.

**BENEFITS OF THE STUDY**

A potential benefit of participating in the I-ECS project is to provide your child with access to computer science lessons that are easy to access and to provide your child the opportunity to explore Computer Science. Your child’s feedback will be incorporated into the design of I-ECS, specifically making the tools and content effective, fun, easy to use and accessible for future users. Ultimately, widespread distribution may play a role in making high school computer science classrooms more accessible for visually impaired students.

**OTHER INFORMATION**

Data in this study will be confidential. You and your child may refuse to participate or may withdraw from the study at any time without penalty. If you have any questions about the form, contact Stephanie Ludi at 585-475-7407 or salvse@rit.edu

Subject’s statement

This study has been explained to me. We volunteer to take part in this research. During the summer camp (CS Academy), my child (circle one) CAN / CANNOT be photographed or videotaped for purposes of the study. Also during the CS Academy, my child (circle one) CAN / CANNOT be photographed or videotaped for purposes of sharing the research results with other or recruiting future participants. We have had a chance to ask questions. If we have questions later about the research, we can ask the researchers listed above. If we have questions about our rights as a research subject, we can contact RIT’s Human Subjects Office (585) 475-5429 or via email at hmfsrs@rit.edu. We will retain a copy of this consent form.

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Printed Name of Child

Printed Name of Parent/Guardian Signature of Parent/Guardian Date

Copies to: Researcher, Subject