InviteCyber – Letter to Parents

Project Title: INteractive Animated VIsualization and PracTice basEd Cybersecurity Curriculum and Training (InviteCyber) Framework for Developing Next-gen Cyber-Aware Workforce
Investigator(s): Dr. Xiaoli Yang (PI, yangx@pnw.edu, (219)989-2763), ECE Department, Purdue University Northwest, 2200 169th street, Hammond, Indiana 46323
Dr. Quamar Niyaz (CoPI, qniyaz@pnw.edu, (219)989-2685), ECE Department, Purdue University Northwest, 2200 169th street, Hammond, Indiana 46323
IRB protocol number (IRB-2020-1119)

Hello!

Your child is invited to enroll in the InviteCyber program, which is a Purdue University Northwest program funded by the National Science Foundation. The program is focused on improving cybersecurity education at the grades 9-12 and increasing awareness of the cybersecurity threats posed by the usage of smartphones to teenagers. Research is an important part of this program and we have included a packet containing consent forms that allows your child to participate in this research. If your child is interested in joining this program, we ask that you complete all highlighted sections of the forms and return them to your child's teacher. If you have any questions about this program or these consent forms, please contact the InviteCyber Program Director, Xiaoli Yang at 219-989-2763 or by yangx@pnw.edu.

Thank you for interest in InviteCyber!

RESEARCH PARTICIPANT CONSENT AND PARENTAL PERMISSION FORM

INteractive Animated VIsualization and PracTice basEd Cybersecurity Curriculum and Training
(InviteCyber) Framework for Developing Next-gen Cyber-Aware Workforce
Dr. Xiaoli Yang (yangx@pnw.edu), Dr. Quamar Niyaz (qniyaz@pnw.edu)
Department of Electrical and Computer Engineering
Purdue University Northwest
IRB protocol number (IRB-2020-1119)

Key Information
Please take time to review this information carefully. This is a research study. Your participation in this study is voluntary which means that you may choose not to participate at any time without penalty or loss of benefits to which you are otherwise entitled. You may ask questions to the researchers about the study whenever you would like. If you decide to take part in the study, you will be asked to sign this form, be sure you understand what you will do and any possible risks or benefits.

- Your child is being invited to participate in a research study
- The purpose of the study is to better understand the effectiveness of an animated visualization-based cybersecurity education curriculum
- This research will consist of a virtual 10-weekend workshop running on Saturdays 9 am –3 pm, and will include surveys.
- There are potential risks, including loss of confidentiality.
- Your child may benefit from your participation in this research by learning more about cybersecurity and developing a security mindset.
- Your child's participation in this research is voluntary.

What is the purpose of this study?
Your child is participating in a research project entitled, *InviteCyber (INteractive Animated VIsualization and PracTice basEd Cybersecurity Curriculum and Training (InviteCyber) Framework for Developing Next-gen Cyber-Aware Workforce)*, a study being conducted by Purdue University Northwest under the direction of Dr. Xiaoli Yang and Dr. Quamar Niyaz. The study research is sponsored by National Science Foundation (NSF). The purpose of this study is to better understand the effectiveness of a visualization-based cybersecurity education curriculum. Additional components to this curriculum include understanding what threats are posed to teenagers by the usage of smartphones and exploring whether this awareness helps them in adapting cyber-safe behavior online. We would like to enroll 20 students for this study.

What will I do if I choose to be in this study?
This educational program will take place at Purdue University Northwest as part of a virtual 10-weekend workshop. Participation in this workshop is completely free and voluntary. Your child will participate in the virtual 10-weekend workshop that will run Saturdays between 9 am-3 pm. There is no additional fee to attend this workshop. Your child will be asked to write computer programs to help them learn smartphone app development which in turn, will help them understand the inner working of these apps. Please note that no prior programming experience is required for this workshop. Your child will be asked to work in a team. Your child will be assessed using surveys before and after the delivery of the developed course materials to measure the impact the new content has on the cybersecurity education of your

child. These will be collected anonymously, meaning that your child's name will not be associated with any data collected for research. We will issue temporary ID number to your child. If you do not provide consent for your child to participate in the research study, your child may not participate in this study and hence, may not participate in the virtual 10-weekend workshop from Purdue University Northwest.

While your child is not the focus of this research, his or her response on the surveys is important to measure the effectiveness of the cybersecurity curriculum that we are evaluating.

Also, we might want to contact you again in the future, after this study is over, so that we can check on your child's progress or invite your child to participate in other studies that may be of interest to you and your child.

Permission to contact: Will you permit us to contact you in the future to invite your child to participate in other studies or to check on your progress? Please note that this permission won't affect your child's participation in the current study.

YES ☐ _____ NO ☐ Initial Here _____

How long will I be in the study?
Your child will participate in the virtual 10-weekend workshop that will run Saturdays between 9 am-3 pm.

What are the possible risks or discomforts?
There are minimal or no risks to participation in this study, including loss of confidentiality. All responses/surveys will be anonymous. Breach of confidentiality is always a risk with data, but we will take precautions to minimize this risk as described in the confidentiality section. If the data is used for future research (if you agree), there is a low risk associated with the de-identified data.

Are there any potential benefits?
The information from this study has an educational benefit by helping researchers understand more about the cybersecurity awareness of grade 9-12 students. It will also help the team in documenting which teaching strategies are the most effective in engaging grade 9-12 students as they learn cybersecurity. In addition, your child may see these additional potential benefits:

1) Develop a security mindset at the high school level.
2) Become aware of the risks and threats associated with the usage of smartphones/tablets.
3) Get interested in cybersecurity careers.

Are there costs to me for participation?
There are no anticipated costs to participate in this research.

This section provides more information about the study

Will information about me and my participation be kept confidential?
The project's research records may be reviewed by the study sponsor/funding agency, National Science Foundation, US DHHS Office for Human Research Protections, and by departments at Purdue University responsible for regulatory and research oversight.

Due to the anonymous nature of responses, there is minimal or no risk of loss of confidentiality. However, the researchers will make every effort to prevent anyone who is not in the research team from knowing that your child provided this information, or what that information is. The consent forms with signatures will be kept separate from responses. Responses will not include names and

will be presented to others only when combined with other responses. Your consent forms with signatures will be kept separate. Your child's name will neither be used nor released. Your child's specific activity will not be the focus of the workshop and your child's name or school will never be associated with any data collected. In addition, all the collected data will be stored in secured storage and only accessible to the research team.

Although we will make every effort to protect your child's confidentiality, there is a minimal risk that this might be breached. Also, you should know that there are some limits to confidentiality. Cases where reported information indicates that your child or another person is judged to be in imminent danger and cases of suspected child abuse or neglect must be reported to the appropriate authorities.

With your permission, the information that is collected from your child's participation in this research may be used in future research studies without your consent, but only after your child's identifying information has been removed from the information. If you do not grant permission for your child's data to be de-identified and used for future research purposes, your child can still participate in the research described in this document. Your agreement to this is voluntary and there are no consequences should you decline to allow your child's data to be used for future research purposes. Do you permit the researcher(s) to use and/or share your child's de- identified data for future research purposes?

YES ☐   NO ☐   Initial Here   _____

What are my rights if I take part in this study?
You do not have to participate in this research project. If you agree to participate, you may withdraw your participation at any time without penalty. However, if you refuse to allow your child to participate in this study (and the virtual 10-weekend workshop), our project team should be informed immediately so that we may approach other candidates for recruitment efforts. Once signed up for this research, your child may discontinue participation at any time without any penalty or loss of benefits.

Who can I contact if I have questions about the study?
If you have questions, comments or concerns about this research project, you can talk to one of the researchers. Please contact a member of the research team Dr. Xiaoli Yang (the first point of contact) 219-989-2763, yangx@pnw.edu or Dr. Quamar Niyaz 219-989-2685, qniyaz@pnw.edu.

To report anonymously via Purdue's Hotline see www.purdue.edu/hotline

If you have questions about your rights while taking part in the study or have concerns about the treatment of research participants, please call the Human Research Protection Program at (765) 494-5942, email (irb@purdue.edu) or write to:

      Human Research Protection Program - Purdue University
      Ernest C. Young Hall, Room 1032
      155 S. Grant St.
      West Lafayette, IN 47907-2114

Documentation of Informed Consent

I have had the opportunity to read this consent form and have the research study explained. I have had the opportunity to ask questions about the research study, and my questions have been answered. I am prepared to let my child participate in the research study described above. I will be offered a copy of this consent form after I sign it.

_____   _____   _____
Name of Parent (Please print)   Signature   Date

_____
Name of Child- Subject (Please print)

_____   _____   _____
Researcher's Name   Signature   Date

InviteCyber Child_Assent_Participant Group

Project Title: INteractive Animated VIsualization and PracTice basEd Cybersecurity Curriculum and Training (InviteCyber) Framework for Developing Next-gen Cyber-Aware Workforce
Investigator(s): Dr. Xiaoli Yang (PI, yangx@pnw.edu, (219)989-2763), ECE Department, Purdue University Northwest, 2200 169th street, Hammond, Indiana 46323
Dr. Quamar Niyaz (CoPI, qniyaz@pnw.edu, (219)989-2685), ECE Department, Purdue University Northwest, 2200 169th street, Hammond, Indiana 46323
IRB protocol number (IRB-2020-1119)

We are doing a research study. A research study is a special way to find out about something. We want to find out how to help you better understand what threats are posed to teenagers by the usage of smartphones and exploring whether this awareness helps them in adapting cyber-safe behavior online.

You can be in this study if you want to. If you want to be in this study, as part of the educational program, you will be taught cybersecurity and smartphone application (app) development. You will be asked to write simple computer programs for app development that may help enhance your understanding of the threats posed by this technology. The virtual workshop will be offered 9 am – 3 pm for ten weekends.

If you agree to participate in the research study, the research team will ask you to complete several Qualtrics surveys during the virtual workshop. These will be collected anonymously, meaning that your name will not be associated with your responses.

While you are not the focus of this research, your response on the surveys is important to measure the effectiveness of the cybersecurity curriculum that we are developing and evaluating.

Everything you say will be confidential. This means that only people working on this project will know what you say. Your consent forms with signatures will be kept separate from the surveys. Your name or school name will not be used or released. Your specific activity will not be the focus of any data collected and your name or school will never be associated with any data collected.

We want to tell you about some things that might happen to you if you are in this study. Since this research is an educational workshop, the anticipated risk is minimal, meaning no more than you might encounter in everyday life.

If you decide to be in this study, some good things might happen to you. We think one benefit might be that you learn about cybersecurity. We also think we might learn things from you that will help us figure out how to teach cybersecurity concepts in a better way and how to teach smartphone application development so that it assists in learning the threats this system poses to teenagers like you. But we don't know for sure that these things will happen. We might also find out things that will help other children some day.

When we are done with the study, we will write a report about what we found out. We won't use your name in the report.

You don't have to be in this study. You can say "no" and nothing bad will happen. If you say "yes" now, but you want to stop later, that's okay too. No one will hurt you, or punish you if you want to stop. All you have to do is tell us you want to stop.

If you want to be in this study, please sign your name.

I, _____, want to be in this research study.
(write your name here)

_____   _____
Investigator signature   (Date)

InviteCyber Cybersecurity Summer Camp Registration Form
(Sponsored by National Science Foundation)
Date: July 6 - July 16, 2021
Purdue University Northwest
Hammond, IN, 46323

PARTICIPANT INFORAMTION

First Name: _____

Last Name: _____

Gender: _____

Age: _____

Email: _____

Phone: _____

Grade (9-12): _____

School: _____

FAMILY INFORAMTION

Parent/Guardian's Full Name: _____

Parent/Guardian's Email: _____

Parent/Guardian's Phone: _____

MAILING ADDRESS

Street: _____, Apt: _____, City: _____

State: _____, Zip: _____

Emergency Contact Name: _____

Relationship to Participant: _____

Phone Number: _____

Participant Signature: _____, **Date**: _____

Parent Signature: _____, **Date**: _____

Purdue University Northwest Waiver, Release and Hold Harmless Agreement

In consideration of participation in an on-campus activity sponsored by National Science Foundation and organized by Purdue University Northwest allowing me

(Please print participant full legal name): _____,

("Participant") (age): _____,

to participate in **InviteCyber Cybersecurity Summer Camp** in Hammond, Indiana, from July 6, 2021, I represent, covenant, and agree, on behalf of myself and my heirs, assigns, and any other person claiming by, under or through me, as follows:

1. I acknowledge that participation in an On Campus activity involves certain risks (some of which I may not fully appreciate) and that injuries, death, property damage or other harm could occur to me or others. I accept and voluntarily incur all risks of any injuries, damages, or harm which arise during or result from my participation in an On Campus or Off Campus Activity, regardless of whether or not caused in whole or in part by the negligence or other fault of The Trustees of Purdue University, Purdue University, Purdue University Northwest, and its past and present officers, attorneys, employees, and its trustees, agents, affiliates, principals, related foundations, insurers, subsidiaries, predecessors, successors and assigns ("Released Parties").
2. I waive all claims against any of the Released Parties for any injuries, damages, losses or claims, whether known or unknown, which arise during or result from my participation in an On Campus or Off Campus Activity, regardless of whether or not caused in whole or part by the negligence or other fault of any of the Released Parties. I release and forever discharge the Released Parties from all such claims.
3. I agree to indemnify and hold the Released Parties harmless from all losses, liabilities, damages, costs or expenses (including but not limited to reasonable attorneys' fees and other litigation costs and expenses) incurred by any of the Released Parties as a result of any claims or suits that I (or anyone claiming by, under or through me) may bring against any of the Released Parties to recover any losses, liabilities, costs, damages, or expenses which arise during or result from my participation in an On Campus or Off Campus Activity, regardless of whether or not caused in whole or part by the negligence or other fault of any of the Released Parties.
4. I have carefully read and reviewed this Waiver, Release and Hold Harmless Agreement. I understand it fully, and I execute it voluntarily.

Participant Printed Name (student): _____

Participant Signature: _____

Date: _____

Parent Printed Name: _____

Parent Signature: _____

Date: _____

Please list an emergency contact. He/She should not be someone traveling with the participant.

Emergency Contact Name: _____

Relationship to Participant: _____

Phone Number: _____