USG STUDENT COMPUTING SURVEY

Thank you for participating in this survey. The purpose of this survey is to find out what brought you to an introductory computing course. Please answer the following items as completely as you can. You may use either a pen or pencil.

1. In what year were you born?	
2. How many older siblings do you have?	
3. In what city were you born?	
4. What are the first three letters of your mother's first name?	

5. What is your gender?

1 Female
2 Male

6. Which best describes you?

1 Asian
2 Black / African American
3 Hispanic
4 Native American / Alaskan Native
5 White
6 Multiracial

7. What is your current academic year?

1 1st Year
2 2nd Year
3 3rd Year
4 4th Year
5 5th Year
6 Other: _____

MIDDLE SCHOOL COMPUTING EXPERIENCE

1. Did you participate in computing activities/clubs at your middle school?

1 Yes
2 No. I chose not to participate.
3 No. There was nothing available in my school.
4 No. I don't know if those activities were available in my school.

2. Did you participate in out-of-school computing activities/clubs while you were a middle school student?

1 Yes
2 No. I chose not to participate.
3 No. There was nothing available.
4 No. I don't know if those activities were available.

3. While in middle school, did you participate in any of these Georgia Tech after-school computing activities? (select all that apply)

- ☐ Boys and Girls Club CS Workshops
- ☐ Cool Girls
- ☐ YWCA Teen Girls in Technology

4. While in middle school, did you participate in any of these Girl Scouts computing events? (select all that apply)

- ☐ Robot Basics/LEGO NXT Robots
- ☐ Mission Robotics Extreme/Advanced Robots
- ☐ Alice
- ☐ PicoCrickets
- ☐ Scratch

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☐ None ☐ Other (please specify): _____	☐ Pleo ☐ Scribbler robots ☐ None ☐ Other (please specify) _____

5. While you were in middle school, did you participate in any of these summer camps? (select all that apply)

- ☐ Albany State University: Computing Summer Camp
- ☐ Columbus State University: Computer Quest
- ☐ Columbus State University: Mission Technology
- ☐ Columbus State University: PicoCrickets
- ☐ Columbus State University: Scratch
- ☐ Columbus State University: LEGO Robots
- ☐ Columbus State University: Alice
- ☐ Columbus State University: GameMaker
- ☐ Columbus State University: Flash
- ☐ Columbus State University: Web Design
- ☐ Columbus State University: Blender
- ☐ Darton College: PicoCrickets Activity
- ☐ Georgia Southwestern: Computing Summer Camp
- ☐ Georgia Tech – Atlanta: Alice/Scratch/Crickets/LEGO (2006)
- ☐ Georgia Tech – Atlanta: RoboCup Jr. (2007-2009)
- ☐ Georgia Tech – Atlanta: Alice/LEGO (2007-2009)
- ☐ Georgia Tech – Atlanta: Boy Scout Engineering Camp
- ☐ Georgia Tech – Savannah: Middle School Computer Science Camp
- ☐ Kennesaw State University: Computing Summer Camp
- ☐ Mercer University: LEGO and Alice
- ☐ Mercer University: PicoCrickets and Scratch

6. While you were in middle school, how interested in computing were you?	Not Interested	Slightly Interested	Somewhat Interested	Very Interested
	1	2	3	4

7. Which basic computer skills from the following list did your middle school offer? (select all that apply)

- ☐ Keyboarding
- ☐ Internet Use
- ☐ Computer applications – Word and Excel
- ☐ Presentation Skills: Power Point
- ☐ HTML Basics
- ☐ Web Page Design
- ☐ Databases: Access
- ☐ Programming using drawings, animation and games
- ☐ Robotics
- ☐ None
- ☐ Other (please specify): _____

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HIGH SCHOOL COMPUTING EXPERIENCE

1. In what state did you graduate from high school?	
2. What is the name of your school district?	
3. What is the name of your high school?	

4. Did you participate in computing activities/clubs at your high school?

1 Yes
2 No. I chose not to participate.
3 No. There was nothing available in my school.
4 No. I don't know if those activities were available in my school.

5. Did you participate in out-of-school computing activities/clubs while you were a high school student?

1 Yes
2 No. I chose not to participate.
3 No. There was nothing available.
4 No. I don't know if those activities were available.

6. While in high school, did you participate in any of these after-school computing activities? (select all that apply)

- ☐ Advanced Placement Computer Science Bowl
- ☐ Boys and Girls Club
- ☐ Cool Computing Day
- ☐ Georgia Tech – Atlanta: Introduce a Girl to Engineering (2007-2009)
- ☐ Glitch
- ☐ None
- ☐ Other (please specify): _____

7. While you were in high school, did you participate in any of these summer camps? (select all that apply)

- ☐ Albany State University: Computing Summer Camp (2008)
- ☐ Columbus State University: Torque (2008)
- ☐ Columbus State University: Python (2009)
- ☐ Georgia Southwestern: Computing Summer Camp (2008 or 2009)
- ☐ Georgia Tech – Atlanta: Scribbler Robots and Media Computation (2009)
- ☐ Georgia Tech – Atlanta: LEGO and Alice (2009)
- ☐ Georgia Tech – Atlanta: LEGO, Alice, and Media Comp. in Python (2007- 2008)
- ☐ Georgia Tech – Atlanta RobotCup Jr (2007-2009)
- ☐ Georgia Tech – Atlanta: ICE @ Tech (2004, 2005, or 2006)
- ☐ Georgia Tech – Savannah: High School Computer Science Camp (2008)
- ☐ Kennesaw State University: Computing Summer Camp (2008)
- ☐ Mercer University: Alice (2009)
- ☐ University of Georgia: Alice (2009)
- ☐ None
- ☐ Other (please specify) _____

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8. While you were in high school, how interested in computing were you?	Not Interested	Slightly Interested	Somewhat Interested	Very Interested
	1	2	3	4

9. What computing courses did you take in high school? (select all that apply) ☐ IT Foundations ☐ Programming and Systems Management ☐ Computing in the Modern World ☐ Beginning Programming ☐ Intermediate Programming ☐ AP Computer Science ☐ Game Animation ☐ Computing Applications ☐ Human Computer Interaction ☐ None ☐ Others (please specify) _____	10. How did you learn about the high school computing activities in which you participated? (e.g. "from a teacher," "from a friend," etc.)
11. If you took computing in high school, who was your computing teacher? (List all computing teachers you had.)	12. Please describe your most interesting computing assignment in high school.

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COLLEGE/UNIVERSITY COMPUTING EXPERIENCE

1. How many college/university computer science courses have you completed?

0 None
1 1
2 2
3 3
4 4
5 5
6 6 or more

2. How many computing instructors have you taken classes from in your college/university computing department?

0 None
1 1
2 2
3 3
4 4
5 5
6 6 or more

3. What factors influenced your decision to take this computing course?

Please rate your agreement or disagreement with the following statements.	**Strongly Disagree**	**Disagree**	**Agree**	**Strongly Agree**
4. I have always wanted to be in computer science.	1	2	3	4
5. I like to program in my spare time.	1	2	3	4
6. I like solving complex logic puzzles.	1	2	3	4
7. I would like to build cutting edge tools and applications that help people.	1	2	3	4
8. I like talking with my friends about programming.	1	2	3	4

9. Outside of your classroom studies, what is your best resource for learning/obtaining new computing skills? (please choose the ONE you use most often)

1 Friends/Peers
2 Internet/websites
3 Professional organizations
4 Self-study
5 Family members
6 Other (please specify)

_____

10. Which best describes you?

1 CS Major
2 CS Minor
3 Undeclared
4 Majoring/minoring in a different computing field. If so, what is your major?

_____

5 Majoring/minoring in a field other than computing. If so, what is your major?

_____

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If you are a computing major or minor, please answer the questions on this page. If you are NOT a computing major or minor, please go to the next page (p. 7)

11. Below are 10 reasons for choosing a computing major/minor. To what extent does each reason apply to you?	Not at all	A little	Some	A lot
I am good at math or science.	1	2	3	4
CS provides good financial opportunities after graduation.	1	2	3	4
CS allows me to be creative.	1	2	3	4
I am interested in helping people or society.	1	2	3	4
I have an interest in computer games.	1	2	3	4
Computing offers diverse and broad opportunities.	1	2	3	4
I am interested in solving problems with computing.	1	2	3	4
I like to program computers.	1	2	3	4
I enjoy working with computers.	1	2	3	4
I am interested in creating computer animation/movies.	1	2	3	4
Other (please specify):	1	2	3	4

12. Please select the current computing major or minor you have declared, if any of these apply?

- ☐ Computer Science
- ☐ Information Systems
- ☐ Information Technology
- ☐ Computer Engineering
- ☐ Software Engineering
- ☐ None
- ☐ Other (please specify)

13. How satisfied are you that you chose to study computing?

1 Very Dissatisfied
2 Dissatisfied
3 Satisfied
4 Very Satisfied

14. Since entering your computing major/minor, have you seriously thought about changing to a different major or minor.

1 No
2 Yes
3 Not Applicable

15. How likely are you to complete your computing major or minor?

1 Very Unlikely
2 Unlikely
3 Likely
4 Very Likely

16. Directly upon graduation, how likely are you to pursue a career where you apply the expertise and skills you will have acquired in your computing major or minor?

1 Very Unlikely
2 Unlikely
3 Likely
4 Very Likely

17. If you have seriously considered switching to a major other than CS, please select your reason(s). (select all that apply)

- ☐ Computing major/minor courses are too difficult.
- ☐ I don't want to do the kind of work that a CS major/minor leads to.
- ☐ I don't enjoy CS courses.
- ☐ I am not sure what jobs are available for students with a computing degree.
- ☐ I don't have confidence that I could succeed in CS.
- ☐ My grades in CS are lower than I want them to be.
- ☐ The computing assignments require too much time.
- ☐ Computing is only about programming.
- ☐ Family, friends, etc. recommend I change.
- ☐ Not applicable, I have not thought about switching majors.
- ☐ Other (please specify): _____

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18. If you are undeclared, how likely are you to declare a computing major or minor?

0 I have already declared a major/minor
1 Very Unlikely
2 Unlikely
3 Likely
4 Very Likely

19. If you are NOT a computing major/minor, check your reason(s) for not selecting computing. (please check all that apply)

- ☐ Computing major/minor courses are too difficult.
- ☐ I don't want to do the kind of work that a computing major/minor leads to.
- ☐ I don't enjoy computing courses.
- ☐ I am not sure what jobs are available for students with a computing degree.
- ☐ I don't have confidence that I could succeed in computing.
- ☐ I have little interest in computing subject matter.
- ☐ It is too expensive to switch majors.
- ☐ My academic performance in computing to date is poor.
- ☐ The computing assignments require too much time.
- ☐ Computing is only about programming.
- ☐ I don't think I belong in computing (don't fit the stereotype).
- ☐ Family, friends, etc. recommend that I not major in computing.
- ☐ Other (please specify): _____

20. If you could go back in time and start college over, how likely is it that you would take computing courses?

1 Very Unlikely
2 Unlikely
3 Likely
4 Very Likely

21. How likely are you to recommend taking computing courses to a friend?

1 Very Unlikely
2 Unlikely
3 Likely
4 Very Likely

22. Has there been a common theme to your programming assignments in any of your computing classes?

1 No
2 Yes – Programming robots
3 Yes – Manipulating images and sounds
4 Yes – Engineering problem-solving
5 Yes – Other. Please specify:

23. Was there one experience in your life that has drawn you to study computing?

1 No
2 Yes. If so, please describe that experience:

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ENCOURAGEMENT AND SUPPORT

1. Have you been encouraged to pursue a computing major/minor or a computing career?

1 No
2 Yes
3 Not Applicable

2. If so, who has offered support? (select all who apply)

- ☐ HS Teachers
- ☐ HS Advisors
- ☐ College/Univ. Faculty
- ☐ College/Univ. Advisor
- ☐ Parents
- ☐ Friends/Peers
- ☐ Other (please specify): _____

3. Do your parents/guardians have careers in computing?

1 Yes – my mother and father do
2 Yes – my mother does
3 Yes – my father does
4 No

4. How important is it to your parents/ guardians for you to obtain a computing degree?	**Not Important At All**	**Not Very Important**	**Somewhat Important**	**Very Important**	**Not Applicable**
	1	2	3	4	n

Please rate how often the following statements occur.	**Never**	**Seldom**	**Often**	**All the time**
5. How often did your High School computing teacher(s) provide you with individual encouragement/feedback in your computing class(es)?	1	2	3	4
6. In my college/university computing classes, students are encouraged to work together on programming assignments.	1	2	3	4
7. How often do you ask questions in your college/university computing classes?	1	2	3	4

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Please rate your agreement or disagreement with the following statements.	Strongly Disagree	Disagree	Agree	Strongly Agree
8. I am comfortable talking to computing professor(s) one-on-one.	1	2	3	4
9. Computing professor(s) have offered me personal advice on how to succeed in computing.	1	2	3	4
10. My college/university computing department offers me information on work and research opportunities.	1	2	3	4
11. I feel like I belong in my college's/university's computing department.	1	2	3	4
12. I feel comfortable asking questions in my college/university computing classes.	1	2	3	4
13. Computing is an important life skill.	1	2	3	4
14. My college/university computing assignments relate to my career goals.	1	2	3	4
15. The materials covered in my college/university courses relate to solving problems important to society.	1	2	3	4
16. Computing assignments increase my interest in computing.	1	2	3	4
17. Computing assignments show me how useful knowledge of computing can be.	1	2	3	4
18. My parents/guardians are better than average at using computers.	1	2	3	4
19. My parents/guardians encouraged me to take computing courses.	1	2	3	4

ABILITY

1. How would you rate your programming skills?	Poor	Below Average	Average	Above Average	Excellent
	1	2	3	4	5

2. I have learned to program by: (select all that apply)	3. How many college/university computing assignments did you find interesting?
☐ Programming robots ☐ Programming games ☐ Manipulating images and sounds ☐ Making video games ☐ Other (please specify)	1 None 2 Some 3 Most 4 All

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CAREER

How important are the following in choosing a career?	Not Important At All	Not Very Important	Somewhat Important	Very Important	Extremely Important
1. Doing work that you find interesting.	1	2	3	4	5
2. Being passionate about your job.	1	2	3	4	5
3. Being able to spend time with your family.	1	2	3	4	5
4. Having the power to do good and doing work that makes a difference.	1	2	3	4	5
5. Having job security.	1	2	3	4	5
6. Having the power to make things happen.	1	2	3	4	5
7. Earning a high salary.	1	2	3	4	5
8. Working in a field with lots of job opportunities.	1	2	3	4	5
9. Having the opportunity to express yourself creatively.	1	2	3	4	5
10. Having the power to create and discover new things.	1	2	3	4	5
11. Being able to use your creativity to solve problems.	1	2	3	4	5
12. Working with people in an interconnected, social, and innovative way.	1	2	3	4	5
13. Working in a prestigious and respected field.	1	2	3	4	5
14. Having a career that allows you to work on a wide variety of projects.	1	2	3	4	5
15. Working in a cutting-edge field.	1	2	3	4	5
16. Doing work that you find challenging.	1	2	3	4	5
17. Other (please specify):					

Thank You!