

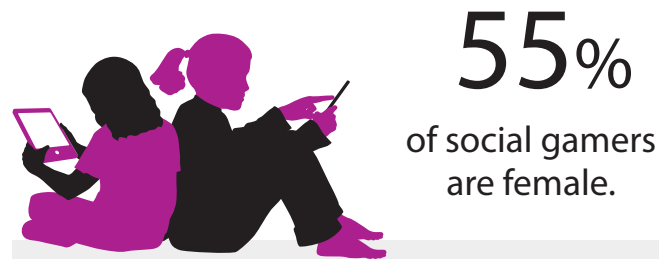
## For girls' eyes only:

Are you curious? Do you like solving problems and puzzles? Are you interested in finding out what you can do with computers? Then come and hang out with us at SAP! We have a lot of fun and exciting activities planned.

GIRLsmarts4tech is your chance to explore and learn about technology and computer science. We have hands-on activities, cool demos, and even some extras to bring home with you at the end of the day.

Did you know?  
The first computer programmer was a woman called **Ada Lovelace**. She theorized that the computer could, one day, play music and chess.

Small computers are embedded into things such as mobile phones, toys, and microwaves. **We use computers all the time, often without even knowing it!**



## Brought to you by:

University of British Columbia  
Committee for Outreach, Diversity, and Equity is a departmental committee at UBC with the goal of increasing female participation in computer science.

SAP  
SAP is a global software company that helps the world run better and improves the lives of people everywhere.

## Testimonials:

From previous GIRLsmarts4tech participants:



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# GIRLsmarts4tech

Brought to you by SAP and UBC

## COMPUTER SCIENCE WORKSHOP for Grade 7 girls

DATE AND TIME:  
November 16, 2019 9:00 a.m.–4:00 p.m.  
February 8, 2020 9:00 a.m.–4:00 p.m.

 REGISTER ONLINE:  
[www.cs.ubc.ca/girlsmarts4tech](http://www.cs.ubc.ca/girlsmarts4tech)

LOW COST  
\$25 for the full-day workshop.  
Scholarships are available.

### REGISTRATION CONTACTS:

Jade Wang  
[girlsmarts-info@cs.ubc.ca](mailto:girlsmarts-info@cs.ubc.ca)



# Workshop Schedule

9:00 a.m.–9:20 a.m.	Arrival / Check-in
9:20 a.m.–10 a.m.	Introductions
10 a.m.–12:15 p.m.	Activities
12:15 p.m.–1 p.m.	Lunch*
1 p.m.–3:15 p.m.	Activities
1:30p.m - 3:00 pm	Parents Workshop**
3 :15p.m.–4 p.m.	Demos and wrap-up

\* Lunch will be provided. If you have special dietary concerns, please arrange to bring your own.

\*\* Optional for parents

## Location

SAP Vancouver  
910 Mainland Street, Vancouver, BC



# Workshop Activities

## Programming

Have you ever wondered how computer games and programs are created? In the programming activity you learn what a “programming language” is, and how to create your own computer program.

## Design Thinking

Have you ever wondered how ideas and design solutions are generated through software development? In the design thinking, user experience and user interface activities, you will learn the process of identifying real world problems and how design can address those problems.

## Exploring Conductivity

Do you know how information is sent through computers? In this activity, you will use conductive paint to paint wires and sensors which can be attached to a micro-controller and used as a musical instrument.

## User experience and user interface

Do you know why you like some apps more than others? Are you curious about why the Instagram home page is so cool? In the user experience and user interface activity, you use your creativity to learn how design influences technology.

## Brain teaser time!

Everything a computer does is based on 1's and 0's. The 1's and 0's then form a string of binary code. Try this puzzle and see if you can crack the code!

Each binary puzzle should be solved according to the following rules:

1. Each box should contain a zero or a one.
2. No more than two similar numbers next to or below each other are allowed.
3. Each row and each column should contain an equal number of zeros and ones.
4. Each row is unique and each column is unique.
5. Each binary puzzle has only one solution. You can always find this solution without guessing.

				0	0
	1				
0	1		1		
0				0	
		1			



REGISTER:  
[www.cs.ubc.ca/girlsmarts4tech](http://www.cs.ubc.ca/girlsmarts4tech)