Women in Computer Science
Orientation Videos!

YouTube Playlist:  [bit.ly/352Rh9C](bit.ly/352Rh9C)

- Classes to Take and What to Expect
- Study Techniques
- Impostor Syndrome and Goals
- Studying Abroad
- Navigating Online Courses
- Extracurriculars
- Navigating Online Resources
Who is WiCS?

Jo Atlee  
Director of WiCS

Alice Gao  
Co-Chair WiCS Committee

Rae Samuel  
WiCS Outreach Coordinator

Savannah Campbell-Sharma  
WiCS Event Co-op

WICS Undergrad Committee
Women in CS at Waterloo

Admissions 2020

• 24% in CS
• 42% in CFM
• 27% in CS/BUS
• 20% in SE

Overall

24% women
## Women in the Tech Industry

*https://github.com/triketora/women-in-software-eng (August, 2019)*

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*19.78%*
Why So Few Women?

Are men innately better programmers?

Are women innately less interested in computing?

“no gender differences in quantitative measures of students’ abilities and performances”

WORLD – Female Enrolment in CS

Computing was “Women’s Work”

Mary Jackson  Katherine Johnson

NASA “computers”
Women in University CS Programs

Percentage of Women Graduating from CS University Programs in US

- Biological Sciences
- Mathematics / Stats
- Physical Sciences
- Computer Sciences
- Engineering

men’s and women’s experiences are different
Pre-University CS Experience

• A few vocal (mostly men) start university with considerable programming experience

• Pre-university experience is not necessary

VS.

playing songs

formal music lessons
Pre-University CS Experience

- A few vocal (mostly men) start university with considerable programming experience

- Pre-university experience is not necessary

- Report nearly equal mastery of CS concepts in intro courses

- Have equal GPAs
Stereotypes and Biases

**Good News**

- Explicit gender bias is declining

**Bad news**

- Unconscious or *implicit gender bias* remains widespread
- Women are as guilty of implicit bias as men are!
- Harvard Implicit Bias Test ([implicit.harvard.edu](http://implicit.harvard.edu))
Self-Confidence Gap (Imposter Syndrome)
Letting the Side Down

Female students are less apt to speak out in class for fear that mistakes or dumb questions it will be taken as proof that women can’t do CS.
Micro-aggressions

Social exchange in which a member of a dominant culture says or does something, usually without intended malice, that belittles and alienates a member of a marginalized group.

Women just aren’t interested in CS.

Really? You don’t look like a CS major. Why do you want to hang out with geeks?

Why would you want to study CS? The guys will be better than you.

You only got into UW CS because you are a girl.

Want me to help you with your CS homework?
Some Sexism

• Undervalued by teammates on course projects

• Undervalued by co-op employers
  – Not given challenging work
  – Assigned quality assurance or technical writing tasks rather than development tasks

• Misogynistic or inappropriate comments in lectures or labs
Technical Girlfriends

It helps a lot to have a network of technical girlfriends

• UW CS guys are great
  – They will be your best friends, study partners, project partners
  – But their experience is not the same as yours

• Girlfriends (who aren’t in STEM) are great
  – But their experience is not the same as yours
WiCS isn’t here because female students need extra help to succeed in CS.

We’re here to help remove, reduce and overcome the extra obstacles that women in computing might face.
WICS

WICS
- Orientation
- WiCS Bubbles
- Technical Interview Prep
- Sexism Response Workshops
- Panel on Meaningful Careers in CS
- Events with Industrial Partners
- Grace Hopper Celebration
  - post-conference take-aways
- CAN-CWIC Conference
- Female Distinguished Lecturers

WICS Undergrads
- BigCSTers mentoring program
- Technical Workshops
- Resume Critiques
- Panel on Fem Tech 101
- Events with Industrial Partners
- Speaker Series
Grace Hopper / CAN-CWIC Conferences
Upcoming Events

• Fall 2020
  WiCS Bubbles

• Sept. 18-19, 1:00-7:00pm ET
  WiCS Con

• Tue. Sept. 22, 12:00pm ET, 8:00pm ET
  Women in Math Welcome Event
How to Find out More

• Read email sent to cs-female-undergrads

• Join the WiCS Facebook group
  Women in Computer Science, Waterloo

• Join the WiCS Slack group
  uwwics2020.slack.com

• Read the CS blog
  http://csatuwaterloo.blogspot.ca/
Parting Words

• Build and use your network of technical women.

• Be yourself. This is what a computer scientist looks like!
Virtual Groupfie!!
Mingle Among Booths

• Exit this chat (click on red button at the bottom left corner)
• There will be a list of the booths that you can visit.
• You can enter, exit, and reenter booths as much as you like

• Inside a booth, use chat to talk with the speaker and others
• OR to be in the booth with video/mic on, then “grab the mic”
  ➢ click on icon of hand holding mic to the left of the chat
  ➢ wait for the speaker to add you to the video chat (max 8)