

February 27, 2016

GIRLsmarts4tech

Parent Workshop





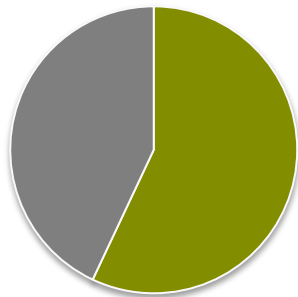
Agenda

- Women in IT
- Your Role as a Parent
- Panel Discussion

Women in IT

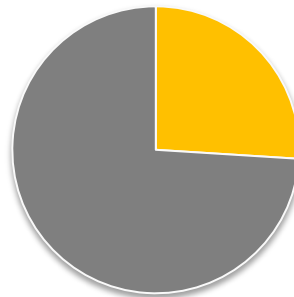
57%

of professional
occupations in
the US
workforce held
by women



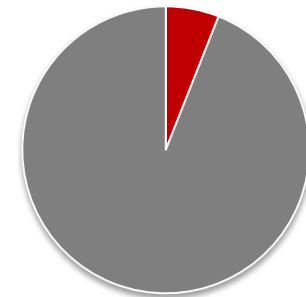
26%

of professional
computing
occupations in
the US
workforce held
by women



6%

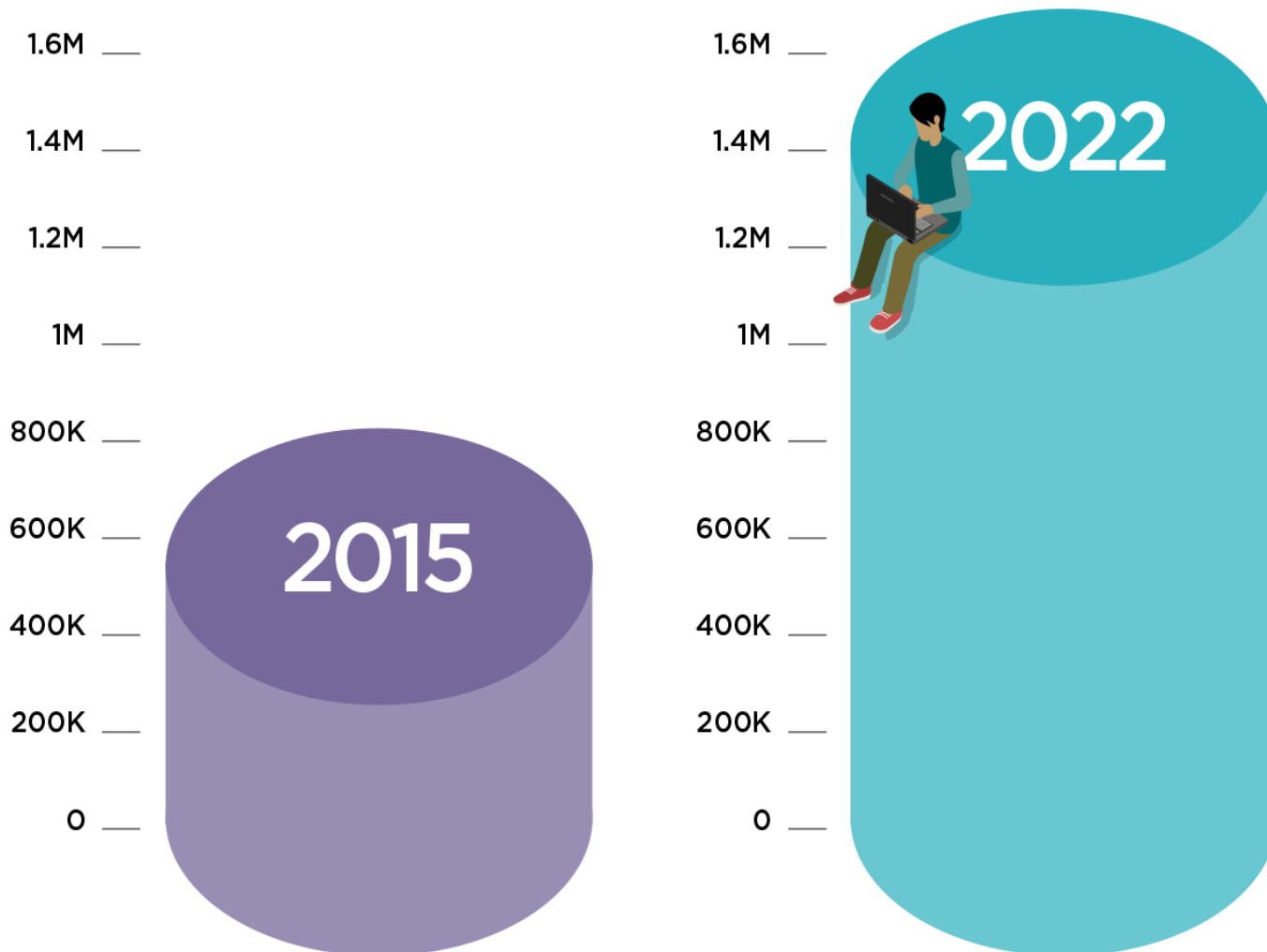
of corporate
Chief
Information
Officer (CIO)
positions held
by women



Pipeline of Computer Science Graduates (less today than 10 years ago)



Opportunities in Computing Jobs



What can you do as a parent?

Encouragement
Exposure

Encouragement



Social Encouragement

- Social encouragement includes **positive reinforcement** from family and peers
- Opportunities to practice puzzles and problem solving in a **supportive environment** can help build confidence and interest
- What matters most is **encouragement!**
 - Regardless of your technical expertise



Exposure



Academic & Career Exposure

- Experience with Computer Science in **middle and high schools** can motivate young women to pursue computing
 - Parents, encourage your daughters to keep taking Math and Sciences in high school!
 - BC to add CS to future curriculum
- Girls exposed to a wide variety of **role-models** and **mentors** help with **Recruitment and Retention**

Panel Discussion to Explore Careers in Tech

- **Nicole Arksey**

- Team Lead for Platform Design, *iQmetrix*

- **Dianne Lapierre**

- Senior Vice President and Chief Information Officer, *Raymond James Ltd*

- **Gail Murphy**

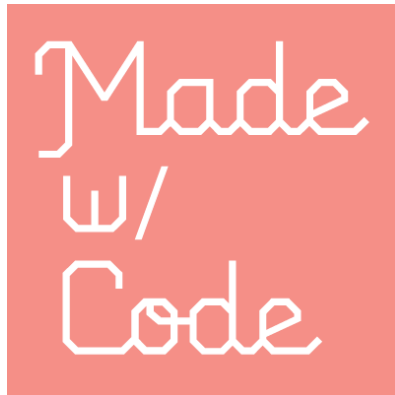
- Professor and Associate Dean, *University of British Columbia*

- Co-founder and Chief Scientist, *Tasktop Technologies*

- **Burak Yoldemir**

- Big Data Developer, *SAP*

Additional Opportunities



TechTrek

Our Team of Volunteers



Broadridge[®]

- **Ghislaine Chan** – Director, Development
- **Michael Ham** – Manager, Development
- **Étienne Hossack** – Systems Developer
- **Faizal Karim** – Systems Developer Analyst
- **Simone Liu** – Systems Developer

Special Thanks

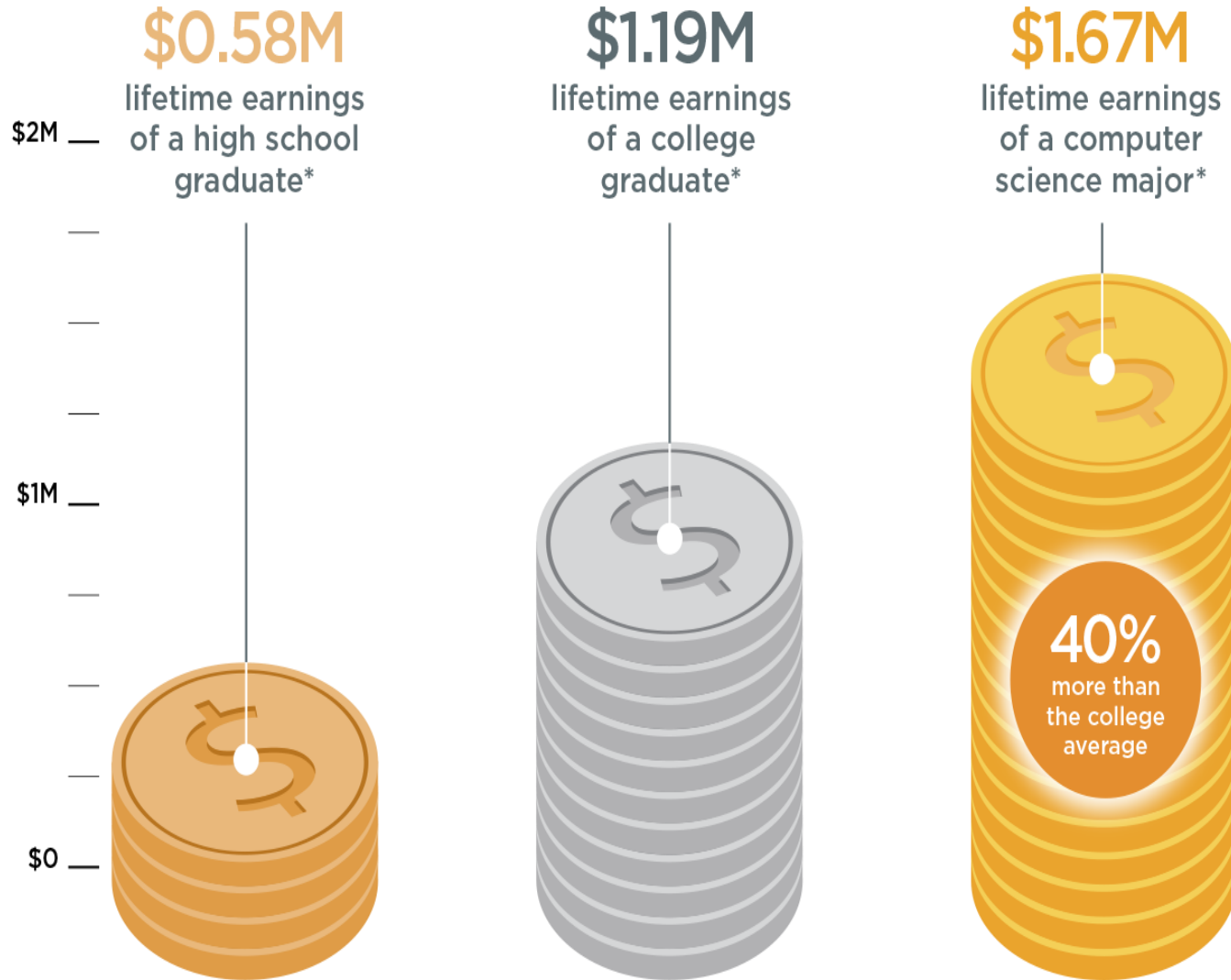


Computer Science

APPENDIX



The value of a computer science education



*Net present value today

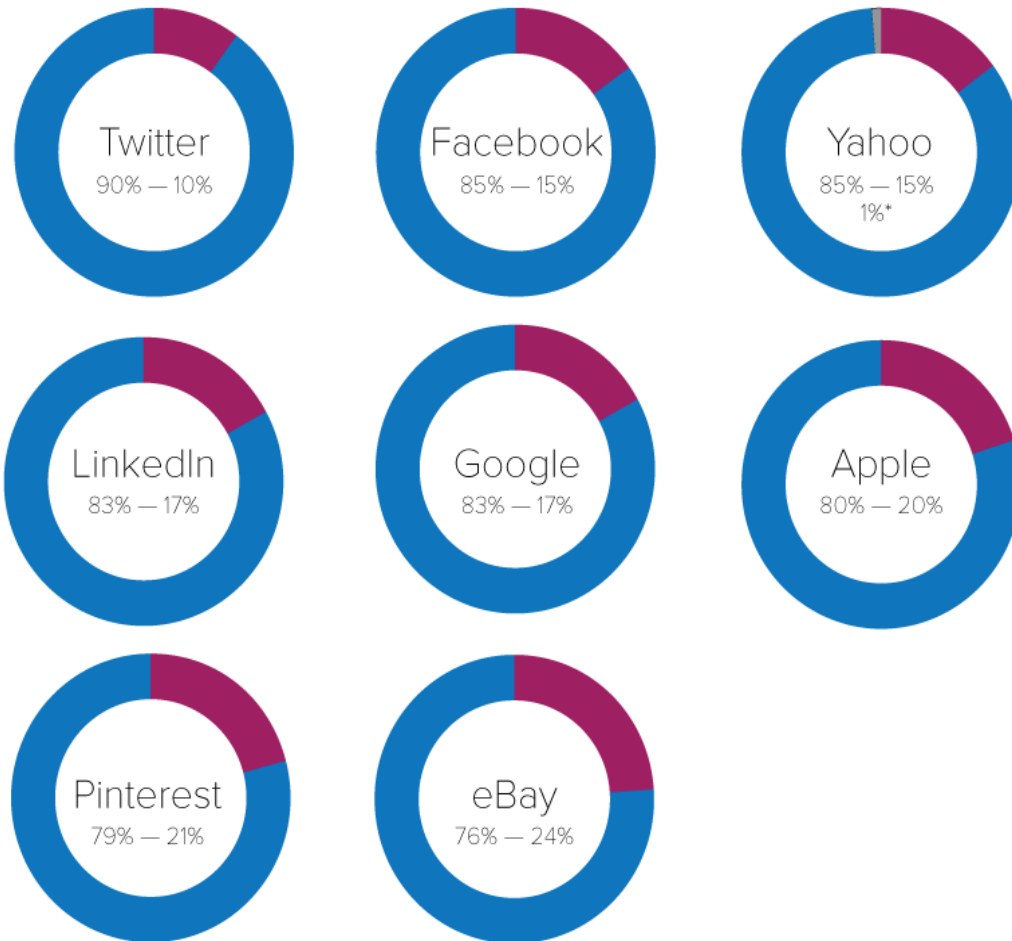
Canadian Perspective



- **Information Systems Analysts and Consultants**
 - Median hourly earnings: **\$35.87** = ~**\$75,000** annually
- **Computer Programmers**
 - Median hourly earnings: **\$33.93** = ~**\$70,500** annually
- **Software Engineers and Designers**
 - Median hourly earnings: **\$41.21** = ~**\$86,000** annually

Tech's Gender Diversity

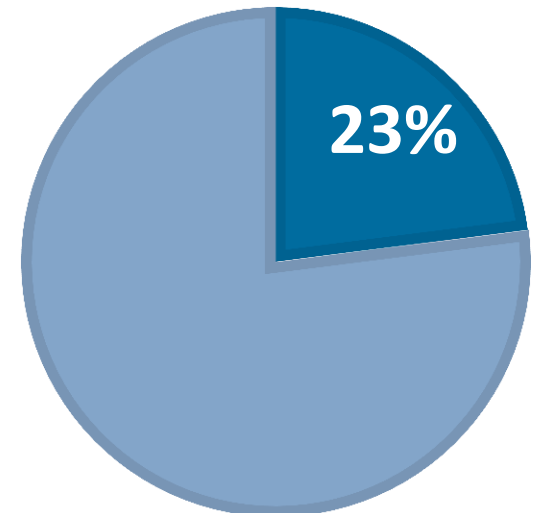
GENDER: TECH



Gigaom graphic by Biz Carson. Source: Company diversity reports released as of August 19, 2014.
*Yahoo reported 1% other/undisclosed. Cisco, Intel, HP and Microsoft did not report tech breakdowns.

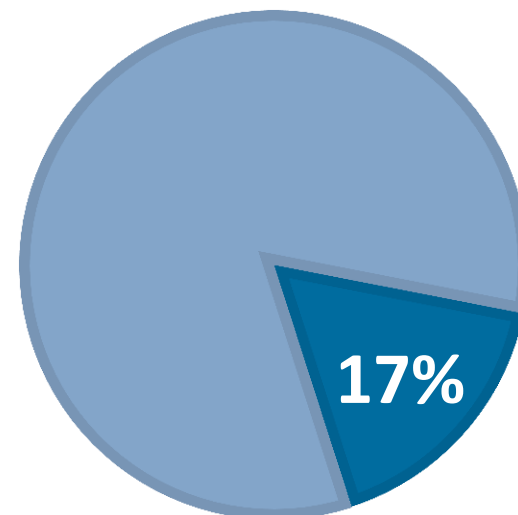
Social Encouragement

- Social encouragement includes **positive reinforcement** from family and peers
- Parental occupation is statistically insignificant in deciding to pursue Computer Science
- What matters most is **encouragement!**
 - Regardless of their technical expertise



Self Perception

- A positive *self-perception* translates to ongoing confidence in your daughter's abilities
- In fact, a girl's *interest* in, and *perceptions* of, her own proficiency in Math and problem solving significantly influences her decision to pursue a Computer Science degree!



Self Perception

- As parents, providing your daughters with the opportunity to practice puzzles and problem solving in a *supportive environment* can help build confidence and interest
- This interest has been shown to translate to *successful* careers



**What it is
is beautiful.**

Have you ever seen anything like it? Not just what she's made, but how proud it's made her. It's a look you'll see whenever children build something all by themselves. No matter what they've created.

Younger children build for fun. LEGO® Universal Building Sets for children ages 3 to 7 have colorful bricks, wheels, and friendly LEGO people for lots and lots of fun.

Older children build for realism. LEGO Universal Building Sets for children 7-12 have more detailed pieces, like gears, rotors, and treaded tires for more realistic building. One set even has a motor.

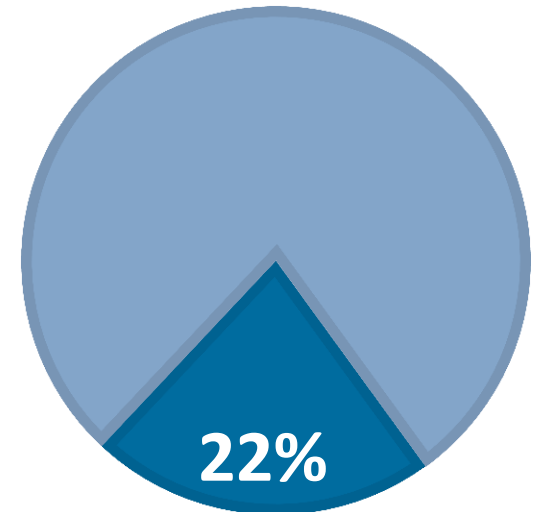
LEGO Universal Building Sets will help your children discover something very, very special: themselves.

LEGO® is a registered trademark of Interlego A.G.
© 1981 LEGO Group

Universal Building Sets
744
LEGO
112
7-12 years old
3-7 years old
LEGO

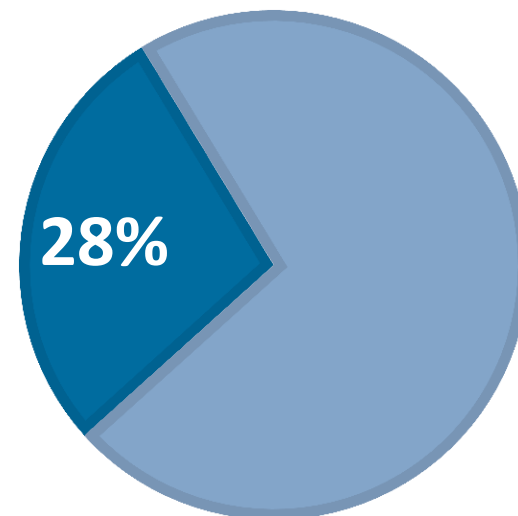
Academic Exposure

- Experience with Computer Science in **middle and high schools** can motivate young women to pursue computing
- BC to add CS to future curriculum
 - As parents, you have a voice!



Career Perception

- Visibility of **female role models** in Computer Science
- Telling stories about **positive social impact** through careers in computing can enable young women to visualize themselves in the field
- Girls exposed to a wide variety of **role-models** and **mentors** help with **Recruitment and Retention**



Technology Trends and Careers



... It's not just programming!

- **AI / Robotics** – automation, smart devices (ex. self-driving cars)
- **Big Data / Analytics** – rate of information creation increasing exponentially; how to extract valuable insights from it?
- **Cloud** – applications and data moving away from local, restricted setups to accessible, scalable architectures
- **Internet of Things (IoT)** – interconnected devices and systems
- **Security** – increasingly important as more applications and systems become interconnected, automated
- **UI / UX** – new technologies lead to new interfaces; how to design and shape user experiences with these interfaces?



Disclaimer

This presentation is provided for information only. Broadridge Financial Solutions, Inc. has done its best to ensure that the material found in this presentation is both useful and accurate. However, please be aware that errors may exist and that Broadridge Financial Solutions, Inc. assumes no responsibility or liability concerning the accuracy of the information that appears in this presentation or in the use to which it may be put.