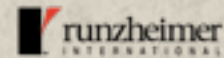# Open up the Clubhouse

@RileyMajor

I am not a woman.

I can't speak for women. I will never fully understand what a woman's experience is.

What is Sex?

What is Gender?

It was never a dress.

axosoft
Agile Project Management

Many of us think of Sex is a simple biological concept— either male or female— but whether you define it based on anatomy or chromosome, it's not that clear cut. "About 1 in 2,000 people born in the U.S. is intersex." https://www.plannedparenthood.org/learn/sexual-orientation-gender/female-male-intersex

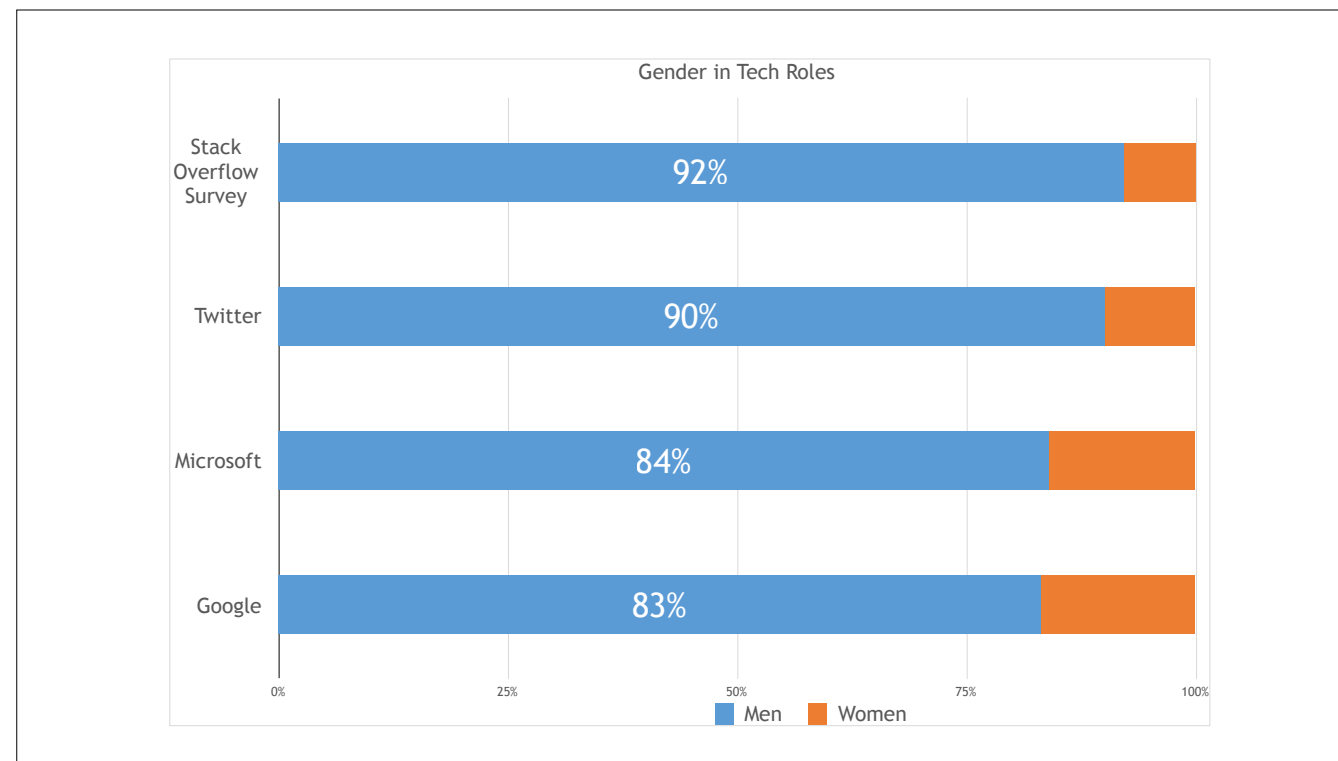Gender is even more complex and has as much to do with society as it does with biology.

I work with computers so binary values are tempting, but they don't do justice to the wide spectrum of people's identities.

That said, a thorough treatment of these subjects is beyond the scope of this talk. So with apologies to transgender or genderqueer folk everywhere, I will generally be using traditional masculine and feminine terminology. Be assured they face the same challenges I'll be describing, often to a greater degree.

Link:

We have a problem.

We are in an industry— technology— which is dominated by men.

Gender in Tech Roles

	Men	Women
Stack Overflow Survey	92%	
Twitter	90%	
Microsoft	84%	
Google	83%	

Sources:

83% of Google's tech workers are male.
http://www.motherjones.com/media/2014/05/google-diversity-labor-gender-race-gap-workers-silicon-valley

84% of Microsoft's tech workers are male.
http://www.cnet.com/news/women-in-tech-the-numbers-dont-add-up/

90% of Twitter's tech workers are male.
http://www.cnet.com/news/women-in-tech-the-numbers-dont-add-up/

92% of Stack Overflow Developer Survey Responses were male.
http://stackoverflow.com/research/developer-survey-2015

Startup Non-Starters

Venture Capital Funded Startups:

< 3% Have Women Technical Founders

< 1% Have Women CEOs

Sources:

http://recode.net/2014/10/23/the-venn-diagram-of-hard-odds-female-technical-founders-with-venture-funding/
http://www.babson.edu/Academics/centers/blank-center/global-research/diana/Documents/diana-project-executive-summary-2014.pdf
http://quibb.com/links/will-a-50-50-pledge-help-fix-gender-equality-in-tech/view

Intersectionality

There are 14 black women out of 2910 US employees at Twitter.

That's less than half a percent.

A proper treatment of intersectionality is well beyond the scope of this talk, but discrimination is amplified when based on multiple characteristics— such as being black and a woman.

http://www.theguardian.com/technology/2015/jul/01/twitter-staff-african-american-diversity

Why should we care?

This is why I care. Well that, and because it's the right thing to do.

Untapped Talent

"if you're not fully utilizing half the talent in the
country, you're not going to get too close to the top."
— Bill Gates, 2010, in Saudi Arabia

"On one side of an auditorium sat men. On the other side of a large partition was a "sea of black," Gates said _ women in full-length abayas that cover their faces, as required in Saudi Arabia."

http://www.washingtonpost.com/wp-dyn/content/article/2007/01/27/AR2007012700951.html

Diversity is Profitable

"I think the most diverse group will produce the best product."
— Tim Cook, Apple

"greater diversity boosted revenue by 41 percent."
— Study

"That's why I care a lot about diversity: not for its own sake,
but because it is a source of strength for teams that have it,
and a symptom of dysfunction for those that don't."
— Eric Ries, pioneer of the lean startup movement

When you dive deeper, you find it's not simply a numbers game. To capitalize on diversity, everyone has to feel comfortable sharing from their diverse viewpoints. And you have to manage the tensions which might arise. But disagreements can make us work harder and the information from everyone's unique backgrounds ultimately makes for a better work product.

Sources:

"Tim Cook Says Diversity is the Future of Apple, Points to More Female-Driven Presence at WWDC"
http://www.macrumors.com/2015/06/08/tim-cook-diversity-future-apple/

"Study: Diverse Teams Are More Successful, but Less Happy"
http://www.inc.com/jessica-stillman/more-diversity-means-more-revenue-but-less-happiness.html

"Why diversity matters (the meritocracy business)"
http://www.startuplessonslearned.com/2010/02/why-diversity-matter-meritocracy.html

Women Leaders Excel

Companies with more women on the board outperformed other companies by 66%.

Women-led companies perform three times better than the S&P 500.

On average, for the S&P 1500, women in top management adds $42 million in firm value.

There are big bucks on the table here. It's in everyone's economic best interest to empower women.

Sources:

"Companies With More Women Board Directors Experience Higher Financial Performance, According to Latest Catalyst Bottom Line Report"
http://www.catalyst.org/media/companies-more-women-board-directors-experience-higher-financial-performance-according-latest

"Research Says: Women On Boards Are Good For Business"
http://www.inpowerwomen.com/research-says-women-on-boards-are-good-for-business/

"Women-led companies perform three times better than the S&P 500"
http://fortune.com/2015/03/03/women-led-companies-perform-three-times-better-than-the-sp-500/
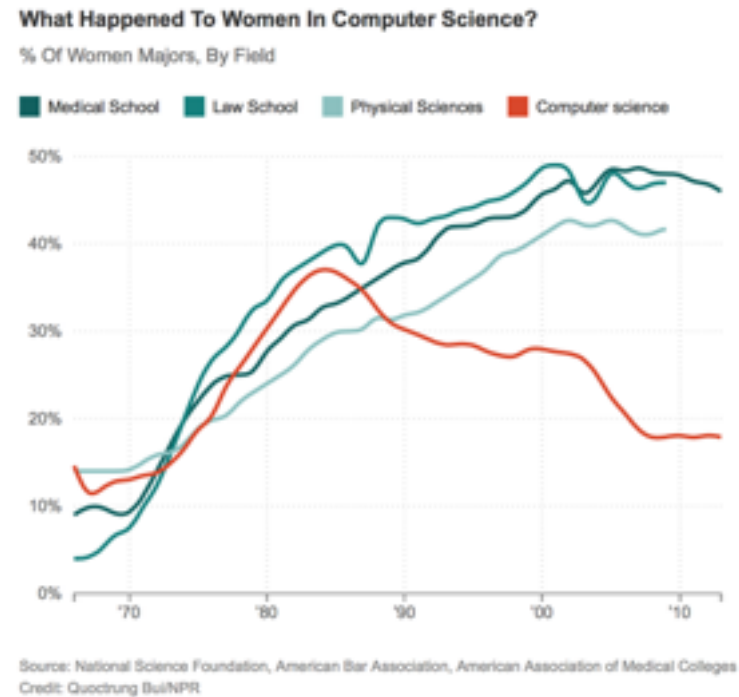
It wasn't always this way.

First Computer Program - Ada Lovelace

First Digital Computer Programmers - Ladies of ENIAC

First Computer Compiler - Grace Hopper

When the ENIAC was built, they tapped the original "computers" (those performing the computations slated for the machine) to operate the new device. They were all women; there were dozens spending all day performing ballistics calculations manually.

And then…

What Happened To Women In Computer Science?
% Of Women Majors, By Field

Medical School   Law School   Physical Sciences   Computer science

Source: National Science Foundation, American Bar Association, American Association of Medical Colleges
Credit: Quoctrung Bui/NPR

Personal computers were the domain of boys— they were marketed to and purchased for boys. Boys came into CS classes with background that put girls at a disadvantage.

Uncle Bob Martin highlighted this during his keynote. Though he skipped over the early contributions of women, he described how in his early years, half of the programmers were women, but by the 80s that dwindled to only a handful.

Sources:

http://www.npr.org/sections/money/2014/10/21/357629765/when-women-stopped-coding

http://www.randalolson.com/2014/06/14/percentage-of-bachelors-degrees-conferred-to-women-by-major-1970-2012/

But wait, there's more…

56% of technical women leave at the mid-level point.

That's double the rate for men.

Source:

http://www.ncwit.org/sites/default/files/legacy/pdf/NCWIT_TheFacts_rev2010.pdf

Tech Industry Rejection

"The industry I work in is not the industry I want to work in."
— Kayla Daniels, author of Code Manifesto, PHP Women
North American Director

"I have not made the tech industry good enough that I'm
willing to work in it again."
— Valerie Aurora, founder of sunsetting Ada Initiative

Source:

https://www.youtube.com/watch?v=gcWdW4gQLY0

"Groundbreaking nonprofit for women in tech, the Ada Initiative, to shut down"
http://www.dailydot.com/technology/ada-initiative-shutdown/

Driving Women Out

1. Culture - demeaning attitudes, condescension, off-color jokes, sexual innuendo, arrogance.

2. Isolation - no mentors, no role models, no buddies.

3. No Advancement Opportunities

4. Heroics - Required, but if women fail, they're pushed out.

5. Family Unfriendly - Long Hours. On Call.

Sources:

Women in Engineering, Science, and Technology
https://books.google.com/books?id=lxX9yrJod88C&pg=PA99&lpg=PA99&dq=family+unfriendly+technology&source=bl&ots=LkXaE5Hevi&sig=LtVeB-KWnnwqz4HPSG29AHjY3Os&hl=en&sa=X&ved=0CEMQ6AEwBmoVChMIv8qo6_CixwIVT3ySCh1jOQEd#v=onepage&q=family%20unfriendly%20technology&f=false

Erasure

Whitney Wolfe was one of the co-founders of Tinder, but the company drove her out and removed her co-founder title.

They believed a "girl founder" both "devalued" the company and made Tinder "look like a joke.

Oh, and there's a good chance she was sexually harassed by another co-founder.

Sources:

https://medium.com/message/stop-erasing-women-from-tech-history-5d99b77ad71b

http://www.rezlaw.com/News-Events/06-30-14_Complaint_with_Exhibits-1.pdf

Toxic Culture

"Early in my career I was horrible to women engineers--crude jokes, commenting on personal appearance, dismissive of technical skill…

I was wrong. Practically and morally. Mea culpa."

— Kent Beck, creator of Extreme Programming and an original signatory of the Agile Manifesto

Sources:

https://www.facebook.com/notes/kent-beck/reflections-of-a-reluctant-sjw/985216038177927

Social Media Abuse

Ms. Mofo
@dELYSEious

Woman: one of my blog posts went viral.
Men: THAT'S GREAT! CONGRATS!
Other women: oh no! shit. You okay? You
need anything? How bad is it?

RETWEETS   FAVORITES
1,199   1,848

9:02 AM - 7 Jul 2015

I'll admit it. I like when I get retweeted. A little validation with every click. Sure, I sometimes worry that someone might unfollow me because they don't like my politics, I never worry that it will go any farther than that.

The Internet is a different place for women.

Source:

https://twitter.com/delyseious/status/61844990574974976O

Social Media Abuse

Feminine usernames incurred an average of 100 sexually explicit or threatening messages a day. Masculine names received 3.7.

Source:

http://www.psmag.com/health-and-behavior/women-arent-welcome-internet-72170

Social Media Abuse

Brianna Wu
@Spacekatgal

Was just sent a link to 403-page internet thread attacking me. 403 pages of bile and slander. I have a message for all those people.

RETWEETS: 35 FAVORITES: 92

7:50 PM - 28 Jul 2015

Gamergate.

https://en.wikipedia.org/wiki/Gamergate_controversy

https://twitter.com/spacekatgal/status/626223117942280192?refsrc=email&s=11

https://en.wikipedia.org/wiki/Gamergate_controversy

She goes on to ask them to go do something with their lives.

Real World Harassment

Things kind of blew up overnight. I became even *more* of a target, if that's possible, and I started having to deal with the ways that harassment could cross over to real life, such as stalkers, SWAT attempts, pizza showing up at my apartment, and email campaigns to my employer and family.
— Randi Harper, author of ggautoblocker

http://opensource.com/life/15/7/interview-randi-harper-online-abuse-prevention-initiative

Sexual Harassment

63 percent of women in STEM fields report experiencing sexual harassment.

Losing women in technology is a vicious cycle. As it becomes more male dominated, the culture becomes less inviting to women, which increases the male domination.

Source:

http://www.bizjournals.com/portland/blog/techflash/2015/02/startup-week-women-minorities-are-in-tech-here-are.html

"It's Different for Girls"
http://heidiroizen.tumblr.com/post/84530650750/its-different-for-girls

Death Threats

"I've had over 100 death threats sent to me by the hate group known as Gamergate in the last nine months."
— Brianna Wu, head of development at Giant Spacekat

"This will be the deadliest school shooting in American history, and I'm giving you a chance to stop it…"
— Email to Utah State University Administrators Warning against Anita Sarkeesian speech.

One of the most chilling things I saw which keyed me into the seriousness of this was a video of a young man who had stranded his car in a median after crashing due to racing someone. He was spewing an aggressive stream of mostly nonsense blaming everything on Brianna Wu, who he was on his way to confront.

Sources:

"Gamergate Death Threat Is a Slam Dunk for Prosecutors. Will They Act?"
http://www.themarysue.com/will-prosecutors-act-on-gamergate-death-threat/

"Feminist Critics of Video Games Facing Threats in 'GamerGate' Campaign"
http://www.nytimes.com/2014/10/16/technology/gamergate-women-video-game-threats-anita-sarkeesian.html

Actual Death

Since 2000, suicide is the leading cause of death of women aged 15 to 19, worldwide.

"The most probable reason is gender discrimination."
- Vikram Patel, co-founder of Centre for Global Mental Health

http://www.theguardian.com/commentisfree/2015/may/28/worldwide-sexism-increases-suicide-risk-in-young-women

Not All Men?

Yes all men.

Even if it's unconscious and subtle.

Even women "themselves display the same biases, often evaluating female employees less favorably than males".

Sources:

"THE NEW SUBTLE SEXISM TOWARD WOMEN IN THE WORKPLACE"
http://www.fastcompany.com/3031101/the-future-of-work/the-new-subtle-sexism-toward-women-in-the-workplace

Microaggressions

Death by 1,000 Cuts

Using "guys" for a mixed gender group.

"Are you here with your [husband/boyfriend]?"

"What do women think about this?"

"Are you sure about that?"

Presuming women will organize parties or take notes.

Apologizing for swearing, only if a woman is present.

Uncle Bob Martin said "How many times per day does your mother interact with software?"

See also: gaslighting.

Sources:

Ways Men In Tech Are Unintentionally Sexist
http://notapattern.net/2014/10/14/ways-men-in-tech-are-unintentionally-sexist/

The Chilly Climate: Subtle Ways in Which Women are Often Treated Differently at Work and in Classrooms
http://www.napequity.org/nape-content/uploads/R1I-The-Chilly-Climate.pdf

"Microaggression and Programming, A Followup Post"
http://groupthink.kinja.com/microaggression-and-programming-a-followup-post-1498316637

Unconscious Bias

2012 Experiment: Exact same application for lab manager with either a male or female name on the top.

Scientists rated "female" applicants lower and also offered lower starting salaries— $26,507.94 compared to $30,238.10.

Sources:

"Study shows gender bias in science is real. Here's why it matters."

http://blogs.scientificamerican.com/unofficial-prognosis/study-shows-gender-bias-in-science-is-real-heres-why-it-matters/

Recruiting Bias

"Women found that jobs with masculinity worded job descriptions less appealing…"

"Men apply for a job when they meet only 60% of the qualifications, but women apply only if they meet 100% of them."

Sources:

"You Don't Know It, But Women See Gender Bias In Your Job Postings"
http://www.eremedia.com/ere/you-dont-know-it-but-women-see-gender-bias-in-your-job-postings/

"Battle of the Sexes: Can Gender Make a Difference in the Job Search?"
https://www.medreps.com/medical-sales-careers/battle-of-the-sexes-can-gender-make-a-difference-in-the-job-search/

"The Hidden Ways Gender Bias Can Sabotage Recruitment"
http://www.business.com/recruiting/the-hidden-ways-gender-bias-can-sabotage-recruitment/

"Here Are The Words That May Keep Women From Applying For Jobs"
http://www.huffingtonpost.com/2015/06/02/textio-unitive-bias-software_n_7493624.html

We Have to Act

"Gender imbalance can be self-perpetuating."

Source:

"Tech Careers for Women: Decoding the Myths"
http://www.huffingtonpost.co.uk/sarah-lawson-johnston/tech-careers-for-women_b_7784794.html

We Must Fix the Culture

ashe dryden
@ashedryden

OH: Should we be encouraging women to get into the pipeline when we know the pipeline leads to a sewage treatment plant?

RETWEETS 52   FAVORITES 74

3:21 PM - 20 Oct 2013

Sources:

https://twitter.com/ashedryden/status/392052865709002752

"The Responsibility of 'Diversity'"
http://www.ashedryden.com/blog/the-responsibility-of-diversity

What can Men do?

1. Be vigilant.
2. Be an ally.
3. Speak up.
4. Recognize Your Privilege
5. Don't be defensive.
6. Don't make mom a noob.

"If you see something say something."

Consider sharing salary information on Twitter with #talkpay hashtag:
http://thinkprogress.org/economy/2015/05/01/3653859/talk-pay/

The first day's keynote, Uncle Bob Martin, did painted mom as a noob: "How many times a day does your mother interact with software? That number is starting to approach once per minute."

Sources:

"Microaggressions in Everyday Life"
https://www.youtube.com/watch?v=BJL2P0JsAS4

Resources

http://juliepagano.com/blog/2014/05/10/so-you-want-to-be-an-ally/

http://www.ashedryden.com

http://codemanifesto.com

https://www.youtube.com/watch?v=gcWdW4gQLY0

https://adainitiative.org/what-we-do/workshops-and-training/

What can Leaders do?

1. Listen to and (carefully) amplify women's voices.

2. Help women find mentors.

3. Recognize that diversity is valuable.

4. Support family-friendly Policies.

5. Consider publishing salary information (#talkpay).

6. Use textio.com for Job Descriptions.

7. Strive to pass the Bechdel test for Tech.

Be careful about how you amplify women's voices, and make sure it's really what they want. Some women object or are offended to be treated differently. Also, some women might be uncomfortable with the additional attention or might fear ill will or retribution from the remarks.

Host team building events during business hours.
http://www.bizjournals.com/portland/blog/techflash/2015/02/startup-week-women-minorities-are-in-tech-here-are.html

Recognize that diversity is part of their value, not a tie breaker.
https://twitter.com/sarahmei/status/60881134448507904

"Let's Talk About Pay"
https://modelviewculture.com/news/lets-talk-about-pay

"Creating Family-Friendly Jobs: It's Easier Than You Think"

Original Bechdel Test

1. The movie has to have at least two women in it,

2. who talk to each other,

3. about something besides a man.

Almost half of all movies fail.

Sources:

http://bechdeltest.com/statistics/

https://en.wikipedia.org/wiki/Bechdel_test

Tech Bechdel Test

Laurie Voss
@seldo

Does your project pass the Bechdel test? To pass, a function written by a woman dev must call a function written by another woman dev.

RETWEETS 1,236 FAVORITES 1,266

3:33 PM - 27 Feb 2015

Source:

"There's Now A Bechdel Test For The Tech World"
https://twitter.com/seldo/status/571453200093437952

What can Conferences do?

1. Have a code of conduct and enforce it.

2. Have a diverse organizing committee.

3. Select talks anonymously using Call for Papers.

4. Use Social Media (@CallbackWomen) and Women Speaker Directories (5050pledge.com).

5. Reach our directly, but don't ask because they are a woman. Ask because they are an expert on the topic.

6. Have fitted and straight-cut t-shirts. Call them that.

7. Consider family friendly options such as on site child care.

Dublin Inspirefest2015

http://www.emercoleman.com/blog/stamping-feet-or-social-sword-the-more-things-change-the-more-they-stay-the-same

Sources:

https://twitter.com/callbackwomen

"A Call for Women Speakers"

http://imbina.com/call-for-women-speakers

"Our mission is to have 50% women speakers at the top technology industry conferences"

http://www.5050pledge.com

"Beating the Odds — How We got 25% Women Speakers for JSConf EU 2012"

What can Parents do?

1. Encourage questions.

2. Encourage experimentation in the garage, yard, and kitchen.

3. Take them to science museums and zoos.

4. Ask them about their STEM classes in school.

5. Help them see value in STEM career.

6. Get them involved in Girl Develop It or other groups.

Source:

"Tips for Encouraging Girls in STEM"
http://www.pbs.org/parents/scigirls/stemsantional-resources/tips-for-encouraging-girls-in-stem/

What about gendered toys?

It's not the toys that are the problem so much as the marketing.

"I like the bright colors and the animals. And they don't have masks and weapons. And they're not always fighting…"
— Rosella Major, 7, on Lego Friends

Just last week she put on a 30 minute play with Lego Friends figurines.

Sources:

"Who Decided That Girls Need Pink Toys? Why Gender Marketing is a Bad Idea"

http://www.forbes.com/sites/work-in-progress/2012/04/06/who-decided-that-girls-need-pink-toys-why-gender-marketing-is-a-bad-idea/

What can Everyone do?

"be bold about the kind of change you do want to see, and even bolder about asking for it."
— Jessica Jackleg, author, cofounder of kiva

Support Girls and Women in Technology Groups

Support Social Media Buzz - #ILookLikeAnEngineer

Sources:

"A Room With a View—and Baby Too"
https://medium.com/thelist/a-room-with-a-view-and-breastfeeding-too-eb1ffd6df085

"You May Have Seen My Face on BART"
https://medium.com/the-coffeelicious/you-may-have-seen-my-face-on-bart-8b9561003e0f

Women in Tech	Girls in Tech

Girl Develop It
https://www.girldevelopit.com/
https://www.girldevelopit.com/chapters/minneapolis
https://www.girldevelopit.com/chapters/milwaukee
https://www.girldevelopit.com/chapters/chicago

Black Girls CODE
http://www.blackgirlscode.org/

Coding While Black
www.codingwhileblack.com

Girls in Tech
http://www.girlsintech.org/
http://gitmsp.org/

Meetup
http://witi.meetup.com/
http://witi.meetup.com/cities/us/mn/saint_paul/

Lesbians Who Tech
www.lesbianswhotech.org

Code Savvy
http://www.codesavvy.org/

TechnovationMN
http://technovationmn.org

Katie Coderdojo
http://www.codesavvy.org/p/katie-coderdojo.html

CoderDojo Twin Cities
http://www.coderdojotc.org
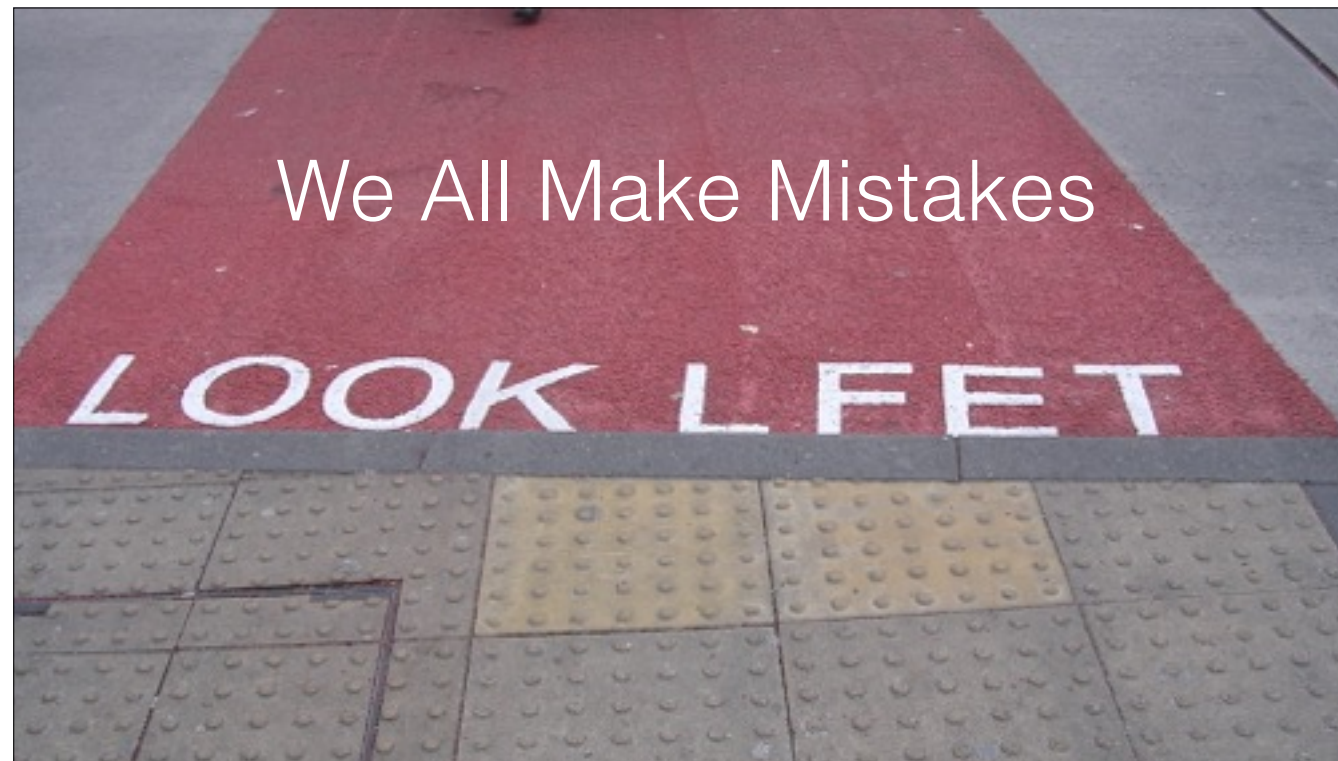
We all make mistakes.

I'm sure we've done a thousand things which have subtly socialized our kids into stereotypically girls' toys, but I remember one in particular.

When you're a parent, you have a constant stream of questions flying at you, all while you are trying to get something else done. Usually, if a kid asks before they do something, it's because they know they probably shouldn't do it. Otherwise they wouldn't bother asking. So you you develop a gut response of "no" when faced with such a constant barrage. One day, in Walmart, we were shopping for winter gloves. Of course there were obviously "boy" gloves and "girl" gloves. Our eldest grabbed a camouflage pair and asked if she could have it— I don't recall if she identified it as a "boy" glove specifically, but I think so. I instinctually said "no, you can't have boy gloves". I regretted it the instant the words were out of my mouth. I spent the next several minutes trying to convince her to get the camouflage gloves but it was too late. I often wonder how much damage with that reflexive lapse.

There is hope

7 girl speakers (100%) at That Conference.

Netflix - 1 Year of Paid Parental Leave

"Tech Companies Cite Small Gains for Women in Updated Diversity Reports"
http://blogs.wsj.com/digits/2015/06/10/tech-companies-cite-small-gains-for-women-in-updated-diversity-reports/

Source:

Angela Dugan @ That Conference

"Netflix Offers New Parents One Year of Paid Leave"
http://www.wsj.com/articles/netflix-offers-new-parents-one-year-of-paid-leave-1438735806

There is hope.

All of you.

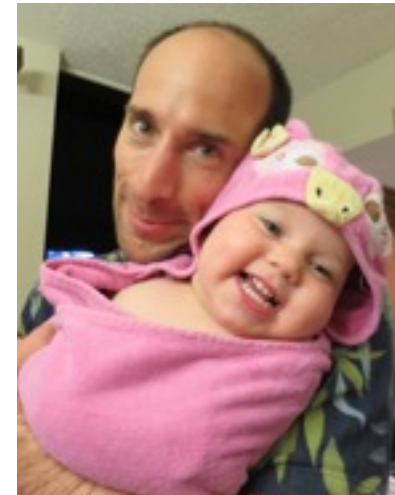# Riley Wheeler Major

@RileyMajor
RileyMajor.com
ThatConference@RileyMajor.com
www.linkedin.com/in/rileymajor/

Enterprise Architect
Manna Freight Systems, Inc.
www.MFSCorporate.com

Misc Sources:

"PITFALLS FOR MEN TALKING ABOUT DIVERSITY"
http://www.catehuston.com/blog/2015/07/08/pitfalls-for-men-talking-about-diversity/

"The process of gendering techical fields to change their relative pay/prestige continues to this day, of course"
https://twitter.com/alicemazzy/status/621761293045907458?refsrc=email&s=11

"Will a 50/50 pledge help fix gender equality in tech?"
http://www.theguardian.com/technology/2015/jul/31/women-technology-gender-equality-50-50-pledge

"101 off limits"
http://juliepagano.com/blog/2013/11/02/101-off-limits/

Image Credits