Gender Issues
The Problem

- Women earn 57% of bachelor’s degrees—but only 18% in computer-related majors (2008)
- Women hold 57% of professional jobs in the U.S.—but only 24% in IT (2008)
Startups

- Women create very few tech startups
- They have more trouble being taken seriously by venture capitalists
- Women are underrepresented in upper management ranks, even relative to their proportion in the field as a whole
It’s Getting Worse

- In 1985, women earned 37% of computer-related bachelor’s degrees
- In 1991, women were 36% of the IT-related professionals
- Why so much lower now?
- Women leave high-tech jobs in mid-career at a rate more than double that for men
Open Source ≠ Open Minds

- Only 1.5% of open source developers are women
- There is often a culture of harassment
- Is the problem lack of accountable management?
It Wasn’t Always Thus

- Countess Ada Lovelace is sometimes credited with being the first computer programmer, for an algorithm she devised for Babbage’s Analytical Engine
- Admiral Grace Hopper was one of the modern pioneers of computing; among other things, she was a very early champion of high-level languages and worked on one of the first compilers
- Programming was once considered (stereotypically) women’s work—“women are good at detail-oriented tasks”
- Besides, early scientific computers replaced the “girls” who did the calculations with mechanical calculators
Why?

- (Subconscious) bias?
- Stereotyping?
- Societal expectations?
- Lack of role models and mentors?
- Probably, all of the above
“We’re a Meritocracy”

- Is it? Or do the loudest voices win?
- (Is saying that “men are louder” stereotyping, or a recognition of a deep cultural dynamic? Both?)
- Do women get the chance to prove themselves in the same venues? Or are they shunted into “softer” parts of the field?
The Professional Milieu

• “Booth babes” at trade shows (though some have “booth beef” as well, or, more generically, “booth bunnies”)
• Jokes—which are not perceived as such by women
• Sexualization of the (often few) women participants
• Locker room atmosphere
Adria Richards

- At a Python developers’ conference, she overheard some very loud, sexist jokes
- She complained to the conference organizers that this violated the (published) code of conduct
- The conference organizers spoke to them—and then one was fired
- Richards was fired, too
- She was also the target of violent, racist, and sexist threats—and she was fired, too
- It took her about two years to find a new job
Uber

- The company apparently had a “brogrammer” culture
- Former CEO Travis Kalanick once referred to the place as “Boob-er”
- Susan Fowler was harassed by her manager and reported it to HR—and they did nothing because he was a “high performer”
- She was apparently the victim of retaliation for filing complaints
- Eventually, she left in disgust, even though she was a star in her field
- There are many more stories like that
Different Work Styles

- Many studies have shown that women approach certain tasks differently
- Example: the role of good grades as a self-motivator
- Example: assuming that success has come from competence (and willingness to let others know this)
- In a fairly strong sense, it doesn’t matter if this is inborn or inculcated by society over 20–30 years
What is the Job?

- “You’re just sitting there pecking away. I need more human interaction” (NY Times article)
- (Reputed?) undersocialized men in the field
- How much of this is true? What do programmers do all day?
The Biological Clock

- Prime child-bearing years—for women—coincide with prime career-building years or prime startup-creating years
- We can’t change biology—but can we make allowances for it?
- Women are often expected (by society, and by themselves) to take more of a role in raising children
The 24/7 Lifestyle

- A lot of software projects demand very long hours
- Women—with societal or self-driven roles at home—are often much less willing to work such hours
- (Law firms have similar problems—but women outnumber men in law school. What’s the difference?)
Perceptions of Bias Differ

- Men and women differ, sharply, on whether or not there are problems.
- Example: 62.5% of women think that men’s role in open source is more acknowledged—but > 80% of men think that gender is irrelevant for this.
- 75% of women say they’ve seen bias in the open source community; only 20% of men have noticed.
Perceptions of Bias

Survey question: “Regarding the FLOSS community as a whole, have you ever observed discriminatory behaviour against women?”

(From FLOSSPOLS: “Gender: Integrated Report of Findings”)

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Steven M. Bellovin  April 22, 2018  17
From One Open Source Contributor

“A fad on [IM] that basically goes ‘I’m so manly, I’m saying women are (unintelligible, a financial drain on their male partner, silly, what-have you).’

“It tells any ‘them’ present that they do not belong. If you are ‘us’ you probably don’t even notice. Trust me, I have been privy to jokes like these the past 15 years and they still occasionally make me question whether I shouldn’t do some knitting instead, since I was clearly not welcome in open source projects for the sin of being female.”
Pragmatic Reasons Why it Matters

“This is also about GSoC, where we are trying to find new contributors. If we should get a good application from a female student, I want to be able to tell her ‘don’t mind A and B, they’re idiots in anything but programming’. I DO NOT BLOODY WANT (excuse the yelling) to have to tell her that nearly everybody is an idiot who tell her twice daily that this is a boys club and she should just quietly leave because they run their mouth (resp their client) without engaging their brain. Because the newbie will not stick around.”

She also noted that another open source project lost six years of bug fixes because she was tired of fighting someone who said “I don’t want to play supporter to some stupid girl”.
And of course, there’s simply justice and morality.