PYTHON += WOMEN

Lynn Root
@roguelynn

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@roguelynn
www.roguelynn.com
lynn@roguelynn.com

WHO AM I?

- Harvard CS Failure

- Women Who Code organizer

- PyLadies San Francisco founder

-I took my first computer science course at Harvard in fall of 2011
	-Failed both exams (really failed)
	-Exposed to Python at a hackathon event
	-Did my final project in Python
		-A site to give understanding to the user's personal inflation rate
	-Finished the course with superior marks, not sure how...
-I wasn't finished learning Python, so I started a study series within Women Who Code
	-Women Who Code is a 1300 member meetup group in the Bay area that holds events just to meet other women coders in the area. There are a few study groups going on, including front end and ruby on rails.

-The energy behind the series carried over to give a great start for the San Francisco chapter of PyLadies. So far we've hosted two large events, including one hack night where men came as female attendees' plus one. The other event was a build your own blog workshop, which was quite popular. We also continually have regular coffee & hack meetings & study groups, and will a lot in the pipeline.

WHY I'M HERE

- What I did

- What I learned

- What you can do

Essentially my talk is:

What I did with Women Who Code, and PyLadies.
What I learned from everything with Women Who Code and PyLadies.
What you can do from what I've learned.

WHAT I DID

PROJECT-BASED

LEARNING

SAFE SPACE

INSPIRATION

Within women who code, I focused on Project Based learning, where week over week, I would learn before the meet up, and give a small tutorial on digestible projects.

I also wanted to great a safe space. I did that by 1) keeping a positive & inclusive attitude, and that wasn't hard because I was excited to learn and teach my fellow newbies, 2) the fact that I was also learning with them created an even playing field.

Lastly, the gal that founded Women Who Code gave me the advice to go big or go home, so I went big and got Guido van Rossum to come kick off the first meet up of the series.

PROJECTS

TWITTER API

DATA HANDLING

DJANGO

–I started off with the Twitter API because it was a simple interface with good documentation on how to use it.
–It also allowed for women to be introduced to the terminal for bash and for the python shell

–We then had some fun with data, where we learned to handle it with python's data types and csv library. We took a big file of data that was difficult to understand, parsed it, and plotted it with different end goals. One dataset we used was the SF crime data, and we used numpy & matplotlib to get simple graphs of rates of crimes, as well as use Google's Map APIs to plot it around our neighborhoods. Certainly these tools already exist but the women really enjoyed seeing how they could do something exactly like that.

–Our final project for the Women Who Code study series was a group website using Django. As a group, we decided what applications we wanted on our website, including pulling in event data from the Meetup API, a form to match up mentors and mentees, a blog, and a page for tools that women can comment on and share what they like to use when developing.

SAFE SPACE

-During these events, I really want to great a safe space, without competition or one-up's-manship.
-The positive attitude is key; but it's easy to keep a positive attitude because we're all here for the same thing! To be surrounded by awesome women, to learn, and to help each other out.

SAFE SPACE

At PyLadies' first event, a Hack Night, we had designated areas for newbies with mentors walking around for assistance

SAFE SPACE

Photo by Robyn Navarro for PyLadies

-Within the workshops and study groups I host, I will encourage women to come up and talk about little bits of what they did, or explain a topic that I'm having difficulty connecting the audience with.

-This gal here was pulled up in front of the Women Who Code'rs to show how she figured out how to plot the SF crime data into Google Maps' API before we even got to that part in the study series. After her mini-presentation, she thanked me for essentially forcing her to get some speaking experience in.

http://blo0p.deviantart.com/#/d515vrh

-inspiration is key
-I brought in voices that women could related to and understand.

INSPIRATION

COMMUNITY

EDUCATIONAL

STORY SHARING

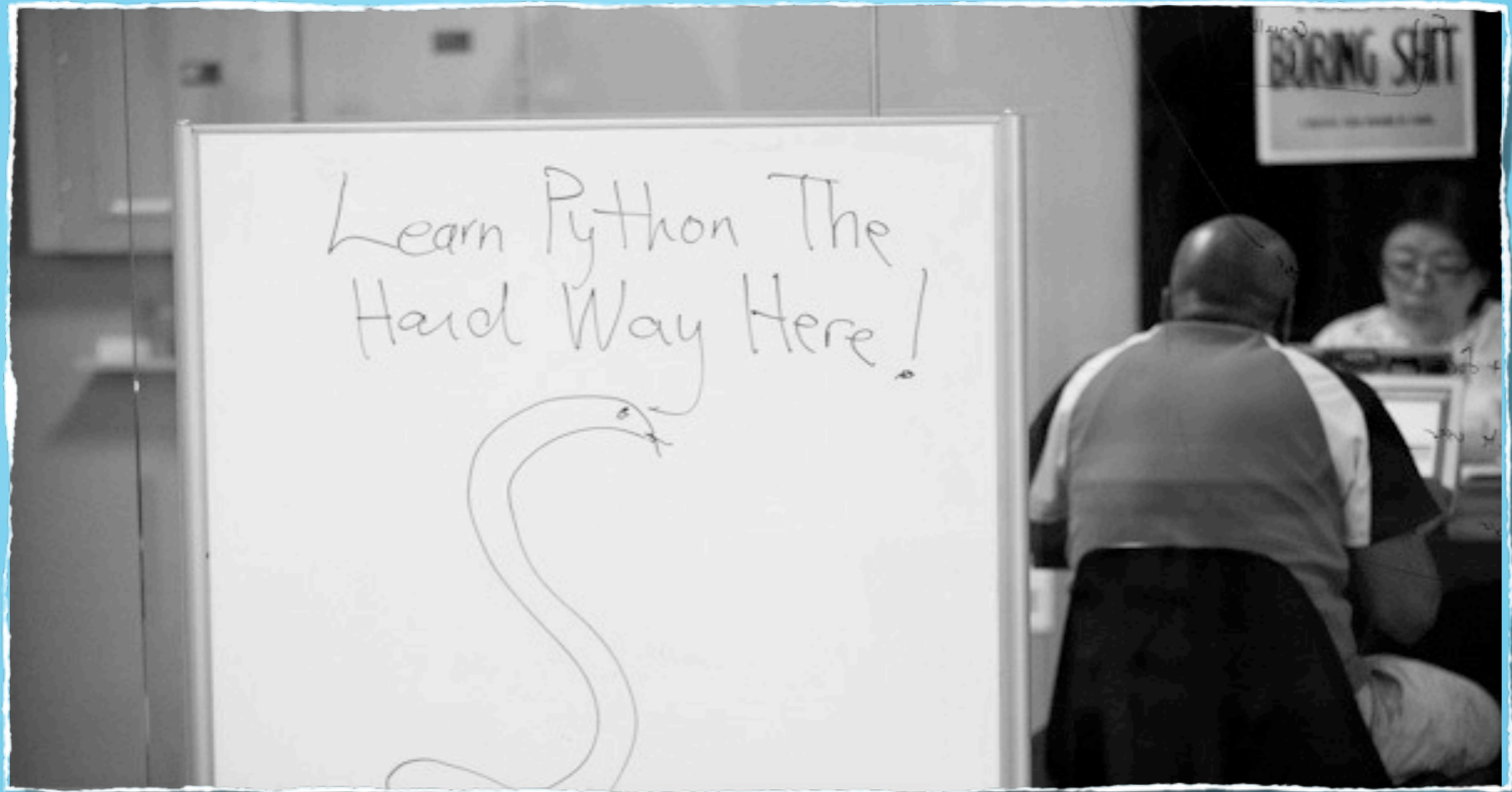-Guido was awesome enough to come in and kick off our first event
        -allowed the women to be existed about the new group
        -showed how easily accessible the community can be
        -answered some tough questions about the global interpreter lock, and even explained what the global interpreter lock (although, I'm still not fully understanding it myself.)

-Leah Culver came in to kick off our Django segment and gave a really good introduction to Model, View, Controller concept

-A Berkeley researcher also dropped by to show some awesome ways to handle data through numpy, scipy, and matplotlib.

-Kaitlyn Trigger, the creator of Lovestagram, a Django overlay for Instagram, came in to tell us how she learned Python & Django to build this app as a valentine's day gift to her boyfriend, the creator of Instagram.

WHAT I'VE LEARNED

I want to quickly point out what I learned while hosting the weekly study groups and starting my own PyLadies chapter.

WHAT I'VE LEARNED

- Confidence
- Inclusiveness
- Community

CONFIDENCE
Some women I've met have issues with confidence because either they can't get passed an error by themselves; or they're switching careers or learning something new.
–How I helped overcome my confidence issue is surrounding myself with helpful people
–How I helped women overcome their confidence is through tutorial work, with a final, tangible project as a goal
–I picked tutorials that would inadvertently demand learning other important topics in computer science or general developing
		–For instance, I hosted a Build your own Blog workship, which I required them to understand virtual environments as well as class based views as a means to understand inheritance
		–With Women Who Code working on a group Django project, Git & Github was introduced for understanding version control

INCLUSIVENESS
–Women need women–only groups not because they need extra help, but they need an inclusive environment.
–Most events I hold, they are for women only and for those who identify as being a women. Occassionally it's women +1, where a men can come but only as a guest of a PyLady

COMMUNITY
–I wanted myself and other women to get exposed to the Python community as a whole. I received funding and passes to bring down a 5 women to PyCon this past March.
–Maybe the talks were over some folks' heads, but all enjoyed learning new aspects of Python and development, as well as building relationships with others within the Python community, and to see how supportive sponsors are for Python developers.
–I also do this with other conferences, including the upcoming OSCON where PyLadies will be represented.
–My next step in getting involved with the Python community is actually organizing a spring for Django next month, where PyLadies + other Django community members will sprint on documentation and the tutorial itself. I want PyLadies to feel like they can contribute back to the community they belong in.

WHAT YOU CAN TAKE AWAY

FOR
WOMEN

- Find or create a welcoming environment

- Share your experiences

- Encouragement

Find/create a welcoming environment
–On meetup.com, there weren't many, if at all, tech & women groups. But I highly suggest finding one for the camaraderie and the support network.
–However if you can't find one by your Google-fu skills, let me help you make a group!
–Every woman here is a PyLady, but if you'd like to start up a group, casual or not, I have a PyLadies starter kit repo on GitHub for those interested. In your current network of women, whether coworkers or meeting for the first time, email everyone about your interest and your goals. Meeting for coffee once a month is just as great as having a technical workshop or a speaker.

Share your experiences
–There are a shortage of female speakers at PyCon and EuroPython. I encourage every woman to share her experience, or to share some awesome tool she built, or present on a better way to approach problems; anything.
        –If uncertain or shy to go for PyCon or next year's EuroPython, give a 5 minute talk at an Ignite or Pecha Kucha event; a lightning talk at a technical meetup; at work; or force it upon your friends
        –If interested but no idea, seek out a friend who knows your strengths to help you ideate.

Encouragement
–Finally, encourage yourself and your fellow PyLadies to speak at conferences or events (anyone might need a nudge); join groups that allow for that safe space, be it women-only or not; and to value your own contribution and work to the community – it's very needed.

FOR MEN

- Active Engagement
- Passive Involvement

ACTIVE
-Directly ask a woman (or many!) you personally know and have a relationship with to give a talk
        -Sometimes it takes a nudge
        -Sometimes it takes help in creating an idea
        -"I think you would give a really great talk on _this subject_"
-Invite your female coworkers to come to a conference
-Money may be an issue for attending or speaking at conferences; help find her avenues for assistance thru the conference or the employer
-Of course all of you don't make any hurtful, misogynist jokes, but if you hear one, you need to call that person out (male or female)
        -Leaves the impression that jokes are okay, or the line of thinking is okay

PASSIVE
-Simple assumptions add up to make a frustrating environment
        -"Are you a recruiter?"
        -The surprise realization that she is, in fact, an engineer/developer/program
        -Shy away from appealing to women through stereotypical colors like pink
-Shy away from seeking out women just to 'help your ratios', whether in conferences, recruiting, whathaveyou
-IMPORTANT: Understanding that women need separate groups (e.g. Women Only) not because they need extra help, but because they need an inclusive environment.
-Also, don't crash our women-only groups. We know you mean well, but it still affects our dynamic.
-General positive attitude

pyladies.com

devchix.com

systers.org

WHY AREN'T YOU ON THESE LISTS?

–There are two very good global mailing lists:
    –Systers, from Anita Borg institute, for general tech and computer with wide levels of experiences
    –DevChix for women developers and engineers; very technical women
        –both are language agnostic

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