



My Cybersecurity Journey

Mary Wang, CISSP
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root@kali:~#whoami

- Mary Wang
- Graduated from Cal Poly Pomona
 - BS. Computer Science
 - MBA Master of Business Administration
- Background:
 - Software Engineering
 - 4.5 years ago – Cybersecurity – Senior Principal Information Assurance Engineer
- Employer: Northrop Grumman Corporation
- Certs: CISSP, CEH, CNDA and Security+
- President Award 2019 – Women's Society of Cyberjutsu (WSC)
- Blue Teamer – at work
- Work with College/High School Interns
- Topics of Interest:
 1. Blue Team – Defense in Depth
 2. Red Team Techniques
 3. Volunteering
 4. Reverse Engineering Malware
 5. Open Source Software
 6. Work Out and Travel



WOMEN'S SOCIETY OF
CYBERJUTSU



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CYBERJUTSU

Empowering Women & Girls in Cybersecurity Careers

- The Women's Society of Cyberjutsu (WSC), a 501(c)3 non-profit, is dedicated to raising awareness of cybersecurity career opportunities and advancement for women in the field, closing the gender gap and the overall workforce gap in information security roles
 - Hands-on Technical Training
 - Networking and Outreach

HOW I STARTED MY CYBERSECURITY CAREER.....

Feb 2012-Nov
2012
Led a research
project

Jan 2013
Took information
systems security
cert courses and
attended security
conferences

Sept 2014
Took an Ethical
Hacking course
and attended
cybersecurity
meet ups



Jan 2015
Participated in a
cyber
competition as a
blue teamer

HOW I STARTED MY CYBERSECURITY CAREER (CONT.)

Aug 2015
Started my first
cybersecurity job at
Raytheon

Sept 2015 – Feb 2017
Passed Security+ cert
exam
Started participating a
CISSP study group

March 2017 - Now
Started my second
cybersecurity job at
Northrop Grumman
Passed CISSP cert exam
Passed CEH cert exam
A member of the WSC
SoCal chapter leadership

Now
Started doing security talks
Won the President Award
2019
Working on an AWS cert
exam

DEGREE AND CERTIFICATIONS

- **GET THEM!**
- STEM Degree Or Degree with Technical Emphasize
 - Computer Science
 - Engineering
 - Computer Information System
 - Information Technology
- Entry Level Certifications
 - **CompTIA Security+**
 - EC-Council Certified Ethical Hacker (CEH)



MY ADVICE FOR COLLEGE STUDENTS

- Stay on the Course
- Take Leadership Roles
- Really Learn
- Follow Cybersecurity People at Social Media
- Practice Public Speaking
 - Soft Skills are Important
- Team Building
- Hang Out and Build Stuff with Other Smart People
 - Participate in competitions and clubs
- Find a Mentor



MY ADVICE FOR COLLEGE STUDENTS (CONT.)

- Attend local meetups
 - Keep on learning
 - Volunteer
- Cybersecurity is a sensitive career field
 1. Do a background of yourself



CYBERSECURITY MEETUPS



COLLEGE INTERNSHIP

- Start apply for one **NOW**
 - Once you are in, mostly likely, you will be hired by graduation
- GPA is important!!
- Participate cyber or coding competitions
- Keep a record of all the home and external projects that you are working on:
 - GitHub Repo
 - All presentations that you did (especially in a conference or meetup)



```
31 def __init__(self):
32     self.file = None
33     self.fingerprints = set()
34     self.logdups = True
35     self.debug = debug
36     self.logger = logging.getLogger(__name__)
37     if path:
38         self.file = open(os.path.join(path, "requests.log"),
39                         "a")
40         self.file.seek(0)
41         self.fingerprints.update(self._get_fingerprints())
42
43 @classmethod
44 def from_settings(cls, settings):
45     debug = settings.getbool("SUPERFILTER_DEBUG")
46     return cls(job_dir(settings), debug)
47
48 def request_seen(self, request):
49     fp = self.request_fingerprint(request)
50     if fp in self.fingerprints:
51         return True
52     self.fingerprints.add(fp)
53     if self.file:
54         self.file.write(fp + os.linesep)
55
56 def request_fingerprint(self, request):
57     return request_fingerprint(request)
```

If you can't code, you'll always be dependent on those who can.

Learn to code.



LAST, TWO POINTS....

1. Volunteer

**2. Do the RIGHT
THING**





Thank
You



PROFESSIONAL ASSOCIATIONS (MEETUP GROUPS)

- Women's Society of Cyberjutsu (WSC) <https://www.meetup.com/SoCal-Women-in-Cybersecurity/>
- Open Web Application Security Project (OWASP) Los Angeles <https://www.meetup.com/OWASP-Los-Angeles/>
- LA Ethical Technical Hackers and Leets (LETHAL) <https://www.meetup.com/LETHAL/>
- ISSA Los Angeles <https://www.meetup.com/ISSA-LA/>
- Cloud Security Alliance, Los Angeles <https://www.meetup.com/LASC-CSA/>