Making the Most
of your Summer Internships

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CRA-W.org
@CRAWomen

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What does CRA-W do?
Individual & Group Research Mentoring

Undergrads: Undergraduate Research Experiences

Undergrads: Distinguished Lecture series/role models

Grad Cohort: Group mentoring of graduate students

Grad Students: Discipline Specific Research workshops

Academics/PhD Researchers: Group mentoring for early and mid career @ CMW, Grace Hopper, and Tapia

Undergraduates → **Graduate Students** → **Academic careers** / **Industry/government labs**

2400+ students & PhDs a year

Stay in touch: CRA-W.org, @CRAWomen, Facebook: CRA-W, Linked-in: CRA-Women

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CRA-W Events at Grace Hopper

Visit the CRA-W Booth in the EXPO to learn more (#2050)

Attend another CRA-W Session
Wednesday (3): Thursday (3) or Friday (1)

Visit a CRA-W Table at the
Student Opportunity Lab on Friday
(Undergrads)

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Who we are?

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Soft Skills and Technical Aspects

Two areas of focus are intertwined: the soft skills and technical

- Soft skills can be focused technically
    - Managing Expectations
    - Professional Relationships
    - Organization culture
    - Make it count for you
    - Own your work
    - Be open to constructive criticism

Working with Technical People

- Synonym for "people skills"
  - Non-technical
  - Can apply soft skills to technical aspects of the job
- Personal attributes that indicate a high level of Emotional Intelligence
- Why do they matter
  - How you deal with technical people, especially your colleagues
  - How you are regarded
  - How you work with others
  - Enable you to function and thrive in teams
  - Creates a healthy work environment

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Technical Expectations are people skills

- Communication – tone, style, tailored to audience, act accordingly
- Self-motivation – initiative, reliability, commitment
- Leadership – positive attitude, outlook, effective communication, motivating others, setting an example
- Responsibility – self awareness, humility, willingness to learn and progress
- Teamwork – working toward a common goal, listener, perceptive

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More soft technical skills … cont

- Problem solving – analytical, critical
- Decisiveness – put things in perspective, weigh options, assess what is relevant, anticipate consequences
- Time management – deadlines, meetings, schedules
- Flexibility – willingness, openmindness
- Negotiation and Conflict Resolution – persuasive, influence, establish rapport

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Manage your Expectations

Have reasonable expectations

- What are you doing for the summer
  - Mundane?
    - Research for someone
    - Graphs for data
    - Lots of reading
  - Glamorous?
    - Arranging meetings
    - Software development – single module
  - Learning the field
    - Exposure
    - Experience
    - Resume
- Make the most of it !!

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Manage your technical Expectations

Have reasonable technical expectations

- What are you doing for the summer
  - If you are a CS major, you should be coding?
    - Find out their coding standards and follow them
    - Ask questions
    - Offer opinions
  - Have someone review your code?
    - Learn from mistakes
    - Learn from different standards
  - Learn before asking
    - Research before asking
    - Ask to clarify
    - Be self-sufficient
- Make the most of it !!

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Professional relationship

Prove yourself through managing your professional relationships

- Dependable
  — Arrive on time and ready
  — Don't goof off
  — Do what you say, manage deadlines
- Attention to detail; be prepared
  — Follow instructions
  — Care about quality of your work
    - Do an excellent job even if it's not the greatest work
    - Build your "work" portfolio
- Listen for great ideas: find your next projects
  — Go to talks and ask questions (think of questions in advance)
  — Go to group meetings and pay attention, participate and contribute
- Be open to trying something new and interesting

Technical relationship

Prove yourself through managing your technical relationships

- Impactful
  - Ask for challenging assignments
  - Complete quickly and ask for feedback
  - Perform and manage deadlines
- Attention to detail; be prepared
  - Documentation – people hate to do this
  - Care about quality of your work
    - Consistently do a good job
    - Save your "work" portfolio – make it available online for future show and tell
- Listen for great ideas from colleagues
  - Be attentive at technical or update meetings and ask questions
    - You may not understand everything – research them
- Be open learning new tools and new programming languages

Organizational Culture

Pay attention to office politics and culture

- Observe how others work in the office and mirror that
  - How do people talk, dress, address each other, do in their down time
  - Perform and act like the staff around you
- Listen but do not gossip
- Get to know the people you need to know
  - Find a way for them to remember you
  - Get to know as many people as possible: unofficial leaders
- Stand out in comparison to other interns
  - Get introduced early on
- Dress appropriately
  - Dress for the job not your campus

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Organizational Technical Culture

Pay attention to how people work

- Observe how others work in the office and mirror that
  – Do they use github, slack/IM, e-mail, gdoc/collaboration
  – Use the same tools like the staff around you
- Get to know the people you need to know
  – 15 min tech coffee break/lunch to learn more
  – Get to know as tech areas possible
- Stand out in comparison to other interns
  – Accomplish technically what others cannot
- Hackathons?
  – Do the same technical activities, ie meet ups

Make it count for you:
Resist the "do-nothing" Internship

Pay attention and focus on your work

- Resist digital socializing
  - Social media, web surfing
  - Texting, IM-ing friends
  - It does impact your work: perception
- Weekly status reports to your supervisor
  - Keep them in the loop
  - Generate new ideas
  - Find out what they are working on
  - Mitigate any issues ie travel plans, alternate technical contact
  - Positive way to end the week
- Staff opinion counts – have a positive memorable impact
  - Be resourceful – research on your own before asking for help
  - Take on challenging projects with optimism and eagerness to learn

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Make it count for you:
Resist the "non-technical" Internship

Pay attention and focus on your work especially

when the task is a challenge

- If your supervisor isn't available, find out who is #2
  - Always know whom you can ask technical questions
  - Always have an objective and a deadline
  - Research the topic
- Show what you have achieved
  - Poster session?
  - Co-write a submission to a conference
  - Apply for a scholarship to attend a technical conference
  - End your internship in a positive way
- Staff opinion counts – have a positive memorable impact
  - Ask about other areas ie systems administration, operations, networking
  - Ask about the type of classes you should be taking, ie computer architecture, software development

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Own your work

Take responsibility for errors

- The impact is greater in the workplace compared to school
    - Affects more than you
    - Handle it correctly
        - Don't blame
        - Don't cover it up
        - Don't make excuses
        - Own it and FIX it
    - Tell your supervisor it won't happen again
        - Mean it !!
- Help others in normalizing a mistake – especially another intern
    - Bring the "cohort" together
        - Leadership role
        - Teamwork, team building
- Say "thank you" and express appreciation

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Be open to Constructive Criticism

Be proactive in seeking and accepting feedback: good or bad

- Ask your supervisor
    - How am I doing?
    - What can I do better?
    - Am I meeting your expectations? Goals of the project?
  - Make it easy for them to provide you input
    - Professional development
    - Make suggestions ie Toastmaster
  - Incorporate into your daily work
- Learn from your co-workers/staff (people want to talk about themselves and will be flattered, and want to help you)
    - Ask about their careers
    - What do they like about it
    - What is a good day, what is a bad day
    - What advice do they have, tell them you value their opinion (potential mentor or sponsor)

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Stretch yourself technically

What to ask for if your internship doesn't have it

- Training: internal "classes"
- Presentation: Brown bag, poster session, final report
  - Gives you a chance to show off what you did for the summer
  - Others who haven't seen you, will see you
  - Ask your supervisor early and schedule it, market it
- Beyond summer
  - Conference presentation
    - Travel support
  - Paper submission, co-author
  - Continue the work: can you be paid to work remotely
  - Potential of returning
  - References

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THANKS

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