# How to collaborate and network

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### A bit about myself

- Interested in broad aspects of game theory, statistical learning and online learning
- As a result, I have attended multiple interdisciplinary conferences including EC, COLT, ICML/NeurIPS, ISIT and INFORMS
- Forging collaborations/networking has been a big part of my career - I will share a few personal stories throughout this presentation

### Some disclaimers...

- I have learned a lot of what I will present, either explicitly or implicitly, from my peers and senior collaborators.
- What I will present is deeply personal and is what has worked best for me.
- I am somewhere in between an extrovert and an introvert; this advice probably works best for that.

### General do's and don'ts for collaborating

### DO:

- Your homework on conference attendees you may want to collaborate with make a list!
- Think especially about interdisciplinary collaborations and their potential for your career
- Have a frank conversation early in the collaboration to make sure everyone is on the same page about project goals, timelines, and meeting frequency.

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### **DON'T:**

- Be afraid of rejection. If a potential collaborator says no it will usually be due to a lack of bandwidth rather than lack of interest.
- Feel the need to say yes to every single collaboration opportunity that comes your way.
  Quality >> quantity
- Stop taking a collaboration seriously midway (it is better to drop out or step back if your bandwidth becomes limited or your priorities change)

### General do's and don'ts for networking

### DO:

- Your homework on conference attendees you may want to talk to and share your research with - make a list!
- Prepare a short 'elevator pitch' to answer the invariable question that will come up: 'What do you work on'?
- Try to talk to a researcher about something specific they do, e.g. something from their talk or paper, in addition to your elevator pitch. *People like it when they see that you have read and absorbed their work!*
- Listen to your instinct if something in a talk resonated with you or you have something interesting to say to the speaker about it, don't be afraid to reach out!

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### **DON'T:**

- Get intimidated by seniority :) a substantive conversation will impress most senior researchers and further your career!
- Worry if you did not get to speak to everyone you wanted to. Quality >> quantity.

## Collaborating early in your graduate career

- Usually works best to start local and in person...
  - Your thesis committee members (and their students/postdocs) can be great collaborators! Also your advisors' external faculty collaborators, if applicable.
  - You can also work with 'research visitors' who are visiting for a semester/ summer.

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- Thesis committee member selection successful qualifying exam translated into collaboration and interaction with a new reading group
- Collaboration with a peer graduate student who was visiting Simons Institute as well as members of my lab (who had different advisors)

## Collaborating later in your graduate/postdoc career

- This is the time to be ambitious and try to realize your 'dream collaboration'!
  - Put some thought into a dream collaboration and what you would want from it –
    some possible key words: interdisciplinary, long-term, solving an open problem...
  - Go with the flow. Collaborations during this time could start from a casual conversation (thus intertwined with 'networking' and even job market interviewing!)

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- Started collaborations during my postdoc that intersected algorithmic game theory and control/RL, and RL theory and practice. Both were very interdisciplinary and rewarding
- Collaborations grew organically out of research conversations at conferences/ workshops, frequently virtual (this was the year when zoom was invented!)

### Collaborating after starting a faculty/researcher job

- This is usually when you will want to start being more choosy and strategic. :)
  - Investing locally in your new research group will take some priority over external collaborations for most new faculty. These are also collaborations!
  - Collaborations with researchers with complementary interests can work especially well at this stage. You can pool resources together (e.g. students, compute...)

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- I spend more time with my students than my external collaborators these days, though I am still very excited and invested in the collaborations I developed during my graduate school and postdoc years and make sure to keep in touch with my collaborators. I say no a lot more than I used to!
- In my faculty job I started collaborations with applied ML researchers in industry as well as academia with the aim of taking some of my theory to practice.

## Networking early in your graduate career

- Lean on your senior resources, attend mentoring workshops, and get to know peers :)
  - Your advisor can introduce you to their friends at conferences :)
  - Getting to know peers is not only fun but beneficial in the long term for your career.
    Conferences but also more focused workshops and mentorship workshops are great places to do this (e.g. Let-All workshops, WALE)
  - You can request funding for attending a conference/workshop even if you don't have an accepted paper! If your advisor does not have sufficient funding there are also travel grants you can apply for.

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- I was very very shy at my first academic conference and mostly socialized with peers. I don't consider it to have been a waste of time. :)
- Research-wise, I got the most out of small focused workshops (e.g. NeurIPS or EC workshops)
  where I got face time with senior researchers and got to present my work to them.

## Networking later in your graduate career

- This is the time to be bold, ambitious and prepared!
  - Targeted networking really impresses people, e.g. showing that you paid attention to someone's talk or read their paper in depth and have something concrete to say about it.
  - Quality >> quantity. A small number of targeted contacts is better than many generic conversations.
  - Don't be shy to mention (casually) your career goals, e.g. that you are on the job market for position X, at the end of a conversation.

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- I tapped a *very* senior researcher on the shoulder to talk to her after listening to her talk because one of her slides was directly connected to a paper I had just preprinted. :)
- In 2019 I slowly turned 'by the way, I am planning to go on the job market this cycle; will you be hiring in this research area?' into a refrain.

### Networking after starting a faculty/researcher job

- Prioritize and strategize.
  - Targeted workshops are sometimes a better investment than big conferences
  - Invited seminars are also great if you have received an informal/casual invitation, don't be shy to take them up on it later on more formally
  - A lot of networking happens with researchers who visit *your* university/ institution. Sign up for 1-1's with them. You do not need to necessarily travel to network!

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- I attended two focused workshops in the last year each of which had < 50 participants and lots of free time in between talks. Very rewarding.
- I signed up for > 15 1-1's last semester with visiting speakers. (Probably too many!)

### Questions?

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