

Virtual Undergraduate Town Hall FAQ  
*Measuring and Optimizing Tail Latency and Research Relationships*  
Speaker: Kathryn McKinley, Host: Lori Pollock  
April 5 at 5:00pm ET

## Measuring and Optimizing Tail Latency

### Where do your workloads come from, and how do you get it to represent reality?

- At Google, I have access to extensive performance data on all our services, which is where we find our problems. We then publish a subset that shows both our motivation and our relative results, but mostly do not publish the exact data. Some datasets are released to encourage research on a topic.

### What kind of background do you need to pursue a career like this? What kind of courses should I be taking?

- In my experience, most Computer Science degrees lack a strong statistics class, which will help you understand if your performance results are meaningful. For this particular research that we discussed today, I would recommend an operating systems class that includes networking, and parallel and distributed systems.

## Research Relationships

### Why bother going to graduate school when the jobs are plentiful and high-paying for Computer Science Bachelor graduates?

- There are great jobs straight from school, but by going to graduate school you become a world expert in some area and you define and shape the future in that area. When you join a company with a PhD it puts you on a higher technical track that means you get to work on more interesting problems right away. If you start straight from undergrad, the company trains you in some area for a long time, but you don't get to explore areas as much.

### How can I begin a mentoring relationship with one of my professors? What are the benefits of establishing this relationship?

- Pick a professor you really like and look up to and start attending his/her office hours. Ask questions during class and try to establish a relationship with that teacher. You already have similar academic interests, so it should be easy to connect. A relationship with a professor can be very beneficial to your career. You can come to him/her for academic advice, internship/job opportunities, and letters of recommendation. Read some of the professor's research papers and ask if you can work on projects that interest you as research assistant.

### What was your biggest concern about going to graduate school once you'd decided to attend?

- I was mostly concerned about funding. I knew that I needed to make money in order to attend graduate school, but I was not aware that almost everyone in graduate school pursuing a Computer Science degree was fully supported. Once I realized this I was so relieved. As our most CS students, I was fully supported throughout my graduate studies.

