

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 We then publish a subset that shows both our motivation and our relative results, but mostly do not publish the exact data.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.

