Student’s T Time
Autumn 2021 Edition

Ranjini Grove:

Welcome to fall quarter! I hope you are all adjusting to being back in person, on campus and resuming some of your normal, pre-pandemic activities. I want to extend a very warm welcome to our new majors. We are a small department and I want to encourage you to participate in our departmental activities to the full extent possible. A few suggestions are given below.

- All students are invited to an online town hall on Nov 2 at 2:30 pm to chat with a committee of Statistics faculty who are tasked with reviewing the major. More details will be forthcoming.
- The graduate students are taking the lead on a Directed Reading Program (DRP) and you could consider participating at least once during your time with us. Please look for an email from Anna Neufeld (@aneufeld) in November for the winter program.
- I invite you to join our student club (SPA), and the DataHuskies listserv. You can find the links here.
- We have a departmental committee focused on Diversity, Inclusion, Community and Equity (DICE) which organizes a few events during the year. Please consider attending/participating. In addition, I would like to have one undergraduate serve as the SPA rep for DICE. If you are interested in serving in this role, please speak to SPA leadership (Lukas inaehrig@uw.edu, Oliver otjalve@uw.edu) to let them know.
- Department lunch gatherings outdoors in the quad (look for messages from Steve @stevewr or Alan @atmin for more information)
- I am looking for a student who can help me with formatting our newsletter Student’s t-time. I aim to publish one every quarter. If you have experience with editing and newsletter formatting (perhaps from high school?), please volunteer for this. Also, please feel free to send me story ideas and to let me know if you want me to include something in a future edition. I am always looking for ideas.

Above all, I hope you are open to enjoying your time in our department, meeting your classmates, learning and challenging yourself and broadening your goals for yourself.

We have an impressive line up of articles for this edition of Student’s t time. Prof. Daniela Witten shares her reflections on working from home this past year. Also Lukas, Lauren, Zach and Angela -- statistics seniors -- discuss their summer internships. We will be profiling more of our seniors over the remaining editions. Happy reading!!

Ask Mee-Ling:

Autumn quarter is a unique quarter as we started in person courses after several quarters of online learning. As we all are adjusting in this transition, I would like to share information which addresses a safe return to campus. Click here to view the Autumn quarter health and safety website.

Also, Virtual Let’s Talk is a good way to connect with experienced counselors without an appointment. I am also available via zoom drop in advising and scheduled appointments for academic planning or any issues you would like to discuss. Have a great Autumn quarter!

From the SPA Desk: Lukas and Oliver

After over a year and a half of virtual meetings, we are excited to begin a new chapter of SPA. We are happy to get the opportunity to hold in-person meetings again this quarter. Due to the focus on academic and career related guest speakers and workshops in the last academic year, we are planning to shift the focus on a more social aspect this year. This will include weekly meetings to re-build and strengthen our Statistics community, as well as planning several fun events that we can all safely and comfortably participate in. More news on weekly meeting time and location will follow shortly as we are finalizing details. Look out for an email from us to the Statistics UGrad and Data Huskies email lists. We look forward to seeing everyone and are hopeful for a year of promoting community, kindness, and support.
Reflections on 19 months of work from home

Daniela Witten
Professor of Statistics & Biostatistics
Dorothy Morrow Gilford Endowed Chair in Mathematical Statistics

It’s been a long year and a half! Over the course of this pandemic, I have been through all of the Covid clichés: I hoarded toilet paper and canned hominy (my local Whole Foods was sold out in March 2020, so naturally I ordered 24 extra-large cans on Amazon), I tended my sourdough starter like a beloved pet (until I forgot about it and it got moldy... in related news, I’ve never had a pet), I ran a home daycare for my three kids (absolutely not an accredited childcare facility), and I purchased (and entered a committed relationship with) my Peloton. The pre-pandemic Before Times are a distant memory.

Now Fall 2021 is here, and my university has finally re-opened. It would be easy to go back into the office as though it were still the Before Times (well, except for the masks). But during this pandemic, I’ve learned a lot about the world, myself, and my job. In an effort to be more intentional about my life and work moving forward, I’m devoting this first column to the lessons I’ve learned during these past 19 months of working from home.

Learning #1: My job is not essential.

When the U.S. shut down in March 2020, everybody stayed home, except for essential workers: hospital employees, grocery clerks, firefighters, etc. You know who did not have to keep going to work? Me. Why? Because my job is not essential. Yes, I love my job, and I care deeply about my students, colleagues, and field. But, when push comes to shove — whether it’s a pandemic or a Zombie apocalypse — the fate of the world does not rest upon my job. I’m going to try to remember this next time I’m rushing to meet a grant deadline or devastated by a paper rejection.

Learning #2: If it could be an e-mail, it should be an e-mail.

Don’t get me wrong: I love my colleagues. At this point I’ve completely forgotten what they look like in three dimensions, and I can’t wait to find out. But, during the Before Times, I also spent a ton of time commuting to campus, getting lost in the UW Health Sciences Building, changing out of my pajama pants, etc. For some meetings, this was worth it. But for others, it was ... not. Sometimes an e-mail (and other times, a Zoom meeting) is enough. I’m going to save the in-person meetings for settings where the in-person component improves the experience: white-boarding with a grad student about research, lunch with a colleague, etc.

Learning #3: Make healthy lifestyle choices.

It’s hard to find time to exercise and eat healthy food and sleep well when I’m in the office 8+ hours per day, and spend every other waking moment taking care of my kids, dealing with household chores, responding to work e-mails, editing manuscripts, etc. During the pandemic, because there were fewer other things to do, I was able to eat better, sleep more, and integrate regular exercise into my daily routine (did I mention my Peloton?). Shout-out to my collaborators and students who pretended not to notice when I showed up at Zoom meetings out of breath and sweaty from a work-out. I am going to find a way to maintain this in the future.

Learning #4: Travel less.

After 19 months of extremely limited travel, I have a huge backlog of personal travel: to visit my family, to take my kiddos on vacation, etc. And I’ve also come to realize that a lot of work travel in the Before Times was really not necessary. In the future, I am going to drastically reduce my work travel: to decrease my carbon footprint, and to be more present in my life in Seattle (which is hard to do when I’m traveling too much). Win-win.

Learning #5: Practice gratitude and kindness.

I’ve been very fortunate these past 19 months: I spent quarantine with my four favorite people (husband and kiddos), I collaborated (on Zoom) with talented colleagues and students, and (most importantly!) my close family and friends stayed healthy. Others have not been so lucky. Life is a hard battle, and some people’s battles were particularly hard during this time. I will be grateful for my good fortune, and kind to others.

Alright, that’s what I’ve learned. Message me on Twitter (@daniela_witten) to let me know what I missed, or the name of your favorite Peloton instructor (the answer is Cody).

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Summer Internships

Angela Zhao
Undergraduate Student

This summer I worked as a data scientist intern at Surge.AI, a marketing intelligence startup in San Francisco. This opportunity was posted by one of our statistics cohorts on the STAT 342 discussion board, many thanks to Zach!

During this two-month internship, I finished 2 projects in total. The first one was about data science consulting, using SQL to retrieve data and using Python to calculate then visualize the trends of appropriate marketing metrics, finally presenting data-driven business insights to clients. Another one was related to the unsupervised algorithm (machine learning stuffs) - enhancing search engine result page (abbr. SERP) with two kinds of searching queries that people commonly phrased. I also applied natural language processing techniques to try another path for improvement. At the end, the improved algorithm was deployed into the company’s marketing product for bringing more relevant search results.

To be honest, the majority of skills and mindsets that I touched on in this internship were unfamiliar to me at the beginning. Internship is more of like a hands-on learning process for us to know what techniques are being used in the real work setting. Also, these two months provided me a clear vision of my interested area/position that I will explore in the future.

Take one suggestion from my mentor as the end: be passionate and get more experience!

Lauren Liao
Undergraduate Student

This summer, I joined Bristol-Myers Squibb as a statistical programmer. I found this internship opportunity through LinkedIn. At BMS, I used R Shiny and Plotly graphic package to analyze lab data from AWS S3 bucket and create browser-based interactive visualization for statistical data review. For example, I created a spaghetti plot (scatter and line chart) coupled with a box plot that dynamically change based on use input and brushing behavior. My work also involve validating data quality and developing automated unit tests to verify applications’ performance, including the interfaces and function logic, in R. Specifically, for data validation, we examine the source of the data, its variables, and their label, data type, and maximum allowed length according to pre-determined requirement and created a validation report in JSON format. In fact, INFO201, which teach R and R Shiny, helps me a lot for this particular position. During this three-month internship, I have gained more experience in programming and communication skills and some of my work got implemented at the team’s official application.

Lukas Naehrig
Undergraduate Student

This summer, I worked at NOAA where I had the chance to work with Dr. Martin Liermann on a salmon population data analysis project. I found this opportunity through the Varanasi Fellowship, which I heard about on the Statistics Undergraduate email list. Our project aimed to predict the population trends of Sockeye salmon in Umbrella Creek, located on the Olympic Peninsula. Our focus was to analyze previous sampling methods, which has exclusively been a mark-recapture method, and use existing data to come up with accurate predictions of the salmon populations. Throughout the summer, we created algorithms to simulate the sampling and prediction methods using various models and equations. We also spent some time working on a Bayesian model in order to come up with parameters for fish death, catch probability, and resample probability. Our main results consisted in narrowing down which prediction method is the most accurate and also included a recommendation to use different colors when tagging the fish (depending on the month they arrive) for future sampling teams. The classes that helped me most with my internship were STAT 302 and INFO 201 for the R coding aspect of the internship as well as the STAT 34x series for the statistical theory aspect of the internship.
This past summer, I was fortunate enough to work at Ernst & Young doing innovation consulting in Tel Aviv, Israel through a program called Birthright Excel. The group I worked with consulted with multinational corporations to either construct R&D centers within Israel or advised existing R&D centers on how to best innovate. To innovate, R&D centers can build products internally or work with external partners such as startups. My main focus of the summer was to understand the processes of internal innovation and research the pain points that might be encountered along the way. I gained great insight into what product and project managers do, the culture companies must have to incent innovation and the difficulties of solving business problems using existing research. Although I didn’t directly use statistics, the Statistics program here at UW has taught me how to think rigorously and I was able to use this rigorous thinking within the business world. I would love to discuss any component of my summer experience with anyone so please do not hesitate to reach out.