

Loyola University Chicago Mathematics and Statistics Summer Newsletter, 2024

Hello Loyola Math and Stats folks! Here is our second annual newsletter. We've had another great and eventful year. I hope you enjoy reading about everything that has been happening!

Congratulations 2024 grads!

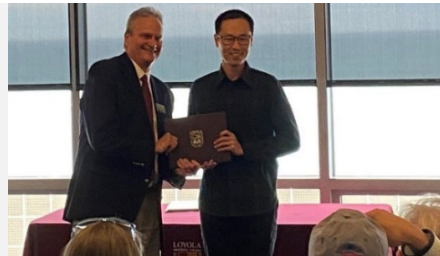
This was another awesome class! I somehow did an even worse job tracking people down after commencement this year. But here are pictures of some people after the ceremony.



Awards and other great things:

Our faculty and students received many prestigious awards and recognitions this year. Here is a selection. And I apologize to anyone who was missed, I know there are other great things going on that I may not have heard about or may have forgotten to include.

1. Miles Xi was named a Sujack Master Researcher. This award was based on several grants and publications that use statistical learning methods in a variety of medical applications. This is very important work and a well-deserved honor. Congratulations Miles!



2. Alec Krueger won the faculty Ally-ship award at the Q-celebration. This is a wonderful recognition of how dedicated Alec is to supporting all students. Congratulations Alec!



3. Cecily Bartsch, a graduating senior who is returning in the fall in our MS program, won a student impact award for her work as a Supplementary Instructor (SI). She is one of many outstanding SIs who do amazing work with students in our 100 level math classes. Congratulations Cecily! And thanks to all SIs!



4. Tim O'Brien received an honorary degree, awarded by King Maha Vajiralongkorn of Thailand, in recognition of his impactful service at the University of Phayao. Well done, Tim! Unfortunately, this picture does not include the king himself.



5. Xiang Wan and Miriam Kabagorobya were named as match fellows. Through this program they have been doing exciting work with middle-school students.



6. Five of our students (Maria Redle, Kellie Wijas, Isabel Renteria, Anurathi Madasi, and Joey Dingillo) attended the Field of Dreams conference in Atlanta, GA. There they attended several workshops and learned about REU's and many opportunities such as grad school and professions in industry. They were accompanied by Dr. Darius Wheeler. We also had several students attend the Joint Math meeting in San Fransisco.



7. The math students' team won the intramural volley-ball championship!



8. Matt Mills and Georgia Tollias won Gratis awards from the Student Accessibility Center



9. Finally, here are our 2024 departmental award winners:

Driscoll Award: Alexander Lewis

Gerst Award: Alexandria Wright

Mayer Award: Leigha DeRango

Reisel Award: Anuraj Nair

Rust Award: Paige Singla

Chair's Award: Cecily Bartsch

VandeValde Award: Isabel Renteria

Zajdel Award: Sebastian Kirkpatrick

The picture has some these folks, and a few other amazing students as well. Apologies to those not in the picture!



Summer 2024 student research

We have another record number of students research this summer! These include

- Will Bales (CAS Undergrad summer research experience (USRE), with Rovi)
- Ramsay Barlow (CAS USRE, with Rovi)
- Babel Barm (CAS USRE with Wan)
- Cecily Bartsch (Rataj summer research student, with Wan)
- Melissa Beerbower (REU, U Puerto Rico)
- Avery Boland (CAS USRE, with Wan)
- Ashley Ciss (CAS USRE, with Gonzalez)
- Joseph Dingillo (Summer Cancer Research Internship at Loyola's Stritch School of Medicine)
- Cole Fleming (CAS USRE, with Seguin)
- Maggie Gonzalez (DEEPS Leadership Alliance REU, Brown)
- Merisa Kraja (CAS USRE, with Tran)
- Anurathi Madasi (LIGO SURF, Caltech)
- Anuraj Nair (Rataj summer research student, with Gonzalez)
- Amanda Newton (CIERA REU at Northwestern)
- Selena Ocampo (CAS USRE, with Chang)
- Amanda Olson (Rataj summer research student, with Tran)
- Kevin Rabinak (CAS USRE, with Matthews/Tingley)
- Delaney Rager (CAS USRE, with Chang)
- Isabel Renteria (Summer undergrad math research at Yale)
- Sarah Riaz (BUMP REU at Youngstown)
- Klaud Rydzy (BigDataX REU, IIT)
- Solana Tabor (CAS USRE with Matthews/Tingley and SIAM Research program, Delaware)
- Julia Williamson (NSA research in Data Science, at NC A&T state)

Apologies to anyone I left off! We also have many students doing exciting internships, and our grads are off getting jobs and, in some cases, going to Ph.D. programs. Our students are amazing!

Events and work in the community

- **Undergrad colloquium series.** We had a wonderful series this year! The speakers were:
 - **Albert Berahas** (U. Michigan): Next generation Algorithms for Stochastic Optimization with Constraints.
 - **Elizabeth Gross** (U. Hawaii): The Algebra and Geometry of Evolutionary Biology.
 - **Emma Zajdela** (Princeton, and an alum of our department): Catalyzing collaborations: Modeling scientific team formation for global impacts.
 - **Claudia Solís-Lemus** (Wisconsin Institute for Discovery): Inferring biological networks.
 - **Frank Baginski** (George Washington U.): The Shape of a High-Altitude Balloon
 - **Rigoberto Florez** (Military College of South Carolina): The strong divisibility property and the resultant of generalized Fibonacci polynomials.

As a new feature of our colloquium series this year six of our students (Cecily Bartsch, Kathryn Cantrell, Cole Fleming, Anurathi Madasi, Amanda Newton, Isabel Rentería) gave 15 min talks about their research. The talks were excellent, and I expect this will become a tradition!

- **Chicago Math teachers circle.** The Chicago math teachers' circle ran a full set of 4 sessions at Loyola during AY2023-2024, working with groups of teachers from CPS and beyond. It is always great to spend time with colleagues teaching our future students! See

<https://mathcirclesofchicago.org/cmtc/>



- **Data fest.** Data fest ran once again, this time with an incredible 76 participants from Loyola and beyond. This is led by Greg Matthews. See <https://www.luc.edu/datascience/events/datafest/>.



- **WIDS.** Our department has also been co-sponsoring Women in Data Science (WIDS) conferences for the last 2 years. Our department representative for this is Mena Whalen. See <https://widschicago.org/>

Clubs

- **Math and stats club.** The math and stats club has been doing great things, as usual. Their volunteer tutoring has been more active than ever. This is now well-integrated with our service-learning class MATH170, developed and taught by Laurie Jordan. Thanks for all this amazing work everyone! They also ran several other great events: Tessellation Creations, Friendship Circle, and Statistics in Football. A great organization as always! They did not send many pictures, but here are some of the folks who did a lot of tutoring.



- **Data Science club.** The data science club is in its second year and going very strong! They have been running weekly study/tutoring/hang out sessions in Loyola Hall, and even organized a half-dozen speakers each semester, including consultants, a sports analyst at the Baltimore Ravens, and a vice-president of analytics from Radius Global. Here is a photo of some of the members, taken at Datafest. Not surprisingly, data science club members seem to have won an award there.



- We have a fairly new student chapter of the Association of Women in Math. They organized a career panel and a women in math colloquium with our alum Emma Zajdela. No photos, but we'll do better on that next year!
- As of this Spring, we have a student chapter of SIAM (the Society for Industrial and Applied Mathematics). I'm sure they will be doing a lot of exciting things next year!

Data Science consulting center. As of summer 2023 we have a Data Science Consulting Center, led by Greg Matthews <gmatthews1@luc.edu>. See <https://www.luc.edu/cdsc/>. Please get in touch with Greg if you have data-related projects the center could help with.

Rataj Scholarships

Thanks to the generosity of our alum Greg Rataj we have been able to establish the Rataj Scholarship fund and have been giving scholarships to two to three students a year over the past several years. See <https://www.luc.edu/math/scholarshipsopportunities/>. These funds also support some of our Undergraduate Colloquium talks and some of the student research above.

Promotions We celebrate four promotions this year!

- **Shuwen Lou:** Promoted to Associate Professor with tenure.
- **John Houlihan:** Promoted to Senior Lecturer
- **Alec Krueger:** Promoted to Advanced Lecturer
- **Alla Podolny:** Promoted to Advanced Lecturer

Comings and goings

We had much less turnover this year than in the recent past – which is a good thing! Of our permanent full-time faculty, we say good-bye to only one: Jose Pastrana. Good luck with the next step of your journey Jose! We did not hire anyone this cycle, but we will be welcoming Giovanni Gravina, who was hired a year ago but delayed starting until fall 2024.

In memory

We were saddened by the passing of long-time department member Joe Mayne. Joe was a member of this department for 48 years before retiring in 2020. During his time at Loyola he served two terms as department chair and was a member of Faculty Council. He also taught countless students. His contributions were not limited to math; he also founded the Loyola Chamber Orchestra, and was the conductor for 27 years. You can find the full obit at

[Obituary information for Joseph Hanson Mayne \(donnellanfuneral.com\)](https://www.donnellanfuneral.com/obituary/joseph-hanson-mayne)

Till next time!

We've managed to keep the annual newsletter alive for 2 years, so I think it is now an established tradition. You can expect another next summer! In the meantime, please drop us a note or come by the department if you are around. And if there are opportunities our students should know about, please send them along and I will share.

Go Ramblers!

P.S. If you want to make sure you get the newsletter next year, and you have not already done so, please join the department's alumni email list using this form

<https://forms.office.com/Pages/ResponsePage.aspx?id=408fApwrJEiDeLvPnsWsyxOWMeTJo8dEkdFE5px60I5UQVg3REhWVFBRMEJDSIROMEhJRUIRskw4NC4u>