

Abigail Price
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Education

Pursuing PhD in Mathematics, University of Illinois at Urbana-Champaign, Urbana, IL
Expected Graduation: 05/2028

Bachelor of Science, Hillsdale College, Hillsdale, MI (2018 - 2022)
GPA: 3.94, Major: Mathematics, Minor: Music

Skills

Languages: Japanese (Intermediate)
Programming/Software: Python, Sage, Matlab, Octave, LaTeX

Experience

Teaching Assistant – Urbana, IL (August 2022 – Present)

- Led discussion sections for College Algebra and Calculus classes
- Graded for Euclidean Geometry and Math 199

Math Tutor – Hillsdale, MI (January 2021 - Present)

- Helped students with problems from a variety of math classes

Kappa Mu Epsilon Michigan Delta Chapter Officer – Hillsdale, MI (October 2020 - Present)

- Served as treasurer from 2020-2021
- Served as president from 2021-present

Media Services – Hillsdale College (September 2018 - Present)

- Ran slo-mo, camera, sound, and graphics for sports events and lectures
- Kept the media database updated and filled orders for recordings of college events

Institutional Advancement – Hillsdale College (May 2019 - Present)

- Maintained data integrity by updating constituent records to institutional standards

MCCS Fast Food Worker – Okinawa, Japan (Summer 2017)

- Responsible for taking customers' orders, serving food, and cleaning

Research Experience

University of California, Davis Math REU – Davis, CA (Summer 2021)

- Learned about Lie group representation theory and its connections with problems involving plane partitions
- Presented research at the end of the summer to the rest of the REU

Clemson University RTG REU – Remote (Summer 2020)

- Worked with mentors and other students to prove new results concerning Eisenstein series
- Collaborated with other students in writing and publishing two original research papers, one on the locations of zeros of Eisenstein series and one on equalities between products of Eisenstein series

- Presented research at an online conference to professors and students from other REU programs

Partitions Research Project – Hillsdale, MI (Summer 2019)

- Studied a binary decomposition of integer partitions
- Designed and presented a poster detailing the project and its results

Publications

- Trevor Griffin, Nathan Kenshur, Abigail Price, Bradshaw Vandenberg-Daves, Hui Xue, and Daozhou Zhu, “Interlacing of Zeros of Eisenstein Series,” *Kyushu Journal of Mathematics* 75 (2021), 249–272.
- Trevor Griffin, Nathan Kenshur, Abigail Price, Bradshaw Vandenberg-Daves, Hui Xue, and Daozhou Zhu, “Monomials of Eisenstein Series,” *Journal of Number Theory* 219 (2021) 445–459.

Awards and Recognitions

- Ruth L. Schulz Memorial Mathematics Prize, 2021
- Benjamin W. Holmes Scholarship (merit students in natural sciences and mathematics), 2020
- Dean’s List, Hillsdale College, 2019-present
- Honor Societies: Kappa Mu Epsilon (Mathematics), Sigma Zeta (Science and Mathematics), Phi Kappa Phi (all disciplines)

Math Presentations and Talks

- *Research by Number: Math REUs and a Brief Introduction to Counting*, Hillsdale College Math Symposium, November 2021
- *Monomials of Eisenstein Series*, 2020 Math REU Conference @ Clemson University, July 2020
- *Integer Partition Decompositions and the Gaussian Binomial Coefficients*, Hillsdale College Undergraduate Science Research Symposium, February 2019

Conferences Attended

- ALGECOM XXII, October 2022
- Nebraska Conference for Undergraduate Women in Mathematics, January 2021
- Rose-Hulman Undergraduate Math Conference, April 2019
- Michigan MAA Section Meeting, April 2019