# Sangjun Ko

sangjun@psu.edu
www.sangjunko.com

## Education

**PhD in Mathematics** August 2022–Present
Penn State University, State College, PA

**BS in Mathematics and Computer Science** September 2018– May 2022
Rutgers University–New Brunswick, New Brunswick, NJ
Rutgers Honors College, Minor in Japanese.
Cumulative GPA: 3.939/4.000

## Research Experience

**DIMACS REU** Summer 2021
Undertook an undergraduate research project on Morse flow trees and Morse complexes under the supervision of Chris Woodward.
Project website: https://reu.dimacs.rutgers.edu/~sk2082/

## Teaching

At Rutgers University:

- Spring 2022: Grader. Math 311 (Introduction to Real Analysis I), Sections H1 and 4.
- Fall 2021: Grader. Math 311 (Introduction to Real Analysis I), Sections 1 and 4.
- Spring 2021: Grader. Math 311 (Introduction to Real Analysis I), Section 1.
- Fall 2020: Grader. Math 300 (Introduction to Mathematical Reasoning), Section 1.

## Awards and Honors

- University Graduate Fellow, Penn State University. 2022–2023
- Graduated from Rutgers University with highest honors in mathematics. May 2022
- Maurice M. and Adrienne R. Weill Scholarship, May 2022
  Rutgers University Math Department.
- School of Arts and Science Excellence Award, Rutgers University. 2021
- Henry Rutgers Scholarship, Rutgers University. 2018–2022
- Rutgers Trustee Scholars, Rutgers University. 2018–2022

## Talks and Presentations

- *A Topological Proof of Euclid's Theorem*, talk for the Rutgers Undergraduate Math Association, March 2022.
- *Morse Flow Trees and Chain Complexes*, part of the DIMACS REU, July 2021.
- *Poincaré Metric*, presentation for the Undergraduate Math Seminar, March 2021.
- *Arithmetic Functions and Divergence of* $\sum 1/p$, presentation for the Directed Reading Program, May 2020.
- *Center of Mass*, presentation for the Freshman-Sophomore Seminar, April 2020.

## Service and Outreach

- Instructor for "Sumongus 300," a mini-course aimed at freshmen to get a crash course on introductory mathematical reasoning in preparation for a proficiency exam. Lecture videos can be found here. Winter 2021.
- Peer tutor in calculus 1 and 2, and introductory computer science. Spring and Fall 2020.

## Miscellaneous

- Languages: Native level fluency in English and Korean, Working proficiency in Japanese.
- Other languages: LaTeX, Java, Kotlin, Python