

YANGQING(GABRIELLE) LI

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Unit 2526, 21 Wellesley College Rd, Wellesley, MA 02481

Citizenship: Chinese

Updated July, 2021

EDUCATION

WELLESLEY COLLEGE

August, 2018 - Dec, 2021

B.A in Mathematics, minor in Music (classical)

GPA: 3.95/4.00 (Major: 4.00/4.00)

MATH 220 Probability

MATH 225 Combinatorics and graph theory

MATH 302 Elements in Analysis

MATH 305 Abstract Algebra

MATH 307 Topology

MATH 310 Complex Analysis

MATH 306 Galois Theory

MATH 350 Functional Analysis (Independent study)

MATH 350 Algebraic Topology II (Independent study)

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

August, 2019 - Dec, 2021

Cross-registration

GPA: 5.00/5.00

6.006 Introduction to Algorithms

18.905 Algebraic Topology I (G)

18.715 Introduction to Representation Theory (G)

18.615 Introduction to Stochastic Process(G)

18.919 Graduate Topology Seminar - Kan Seminar (G, Fall 2021)

ACADEMIC EXPERIENCE

Math REU participant, The University of Chicago

June, 2021 - August, 2021

I attended math lecture series on various topics. My own work accumulated to a final talk on Steenrod algebra and an expository paper on Adams spectral sequence. Mentored by Professor J. Peter May and Dr Hana Jia Kong.

Women in Mathematics (WAM) participant, Institute for Advanced Study

May, 2021

I participated in seminars and lecture series on representation theory and categorification.

Math REU participant, The University of Chicago

June, 2020 - August, 2020

I attended math lecture series on various topics. My own work accumulated to a final talk on orientation theory of bundles and an expository paper on generalized bundle theory. Mentored by Professor J. Peter May and Hana Jia Kong.

Teaching assistant, Wellesley College Math Department

January, 2019 - current

I graded 200 and 300 level courses including combinatorics and graph theory, real analysis, topology, and complex analysis, provided feedback to the instructors, and held drop-in office hours. I am currently grading topology in fall 2021.

Student research assistant, Wellesley College Chemistry Department

January, 2019 - July, 2019

I performed simulations the impact of cosmic ice energetic processing on the synthesis of extraterrestrial prebiotic molecules in Christopher Arumainayagams computational chemistry lab.

EXPOSITORY TALKS

Math REU Participant Talk, The University of Chicago

Orientation theory of bundles (*August, 2020*)

Adams spectral sequence (*August, 2021*)

Kan Seminar, MIT

On Serre's *Cohomologie modulo 2 des complexes d'Eilenberg-MacLane* (*September, 2021*)

On Adams' *Stable Homotopy Theory* (*October, 2021*)

TBD (*November, 2021*)

SKILLS

Programming languages and softwares

C++ (proficient), \LaTeX (proficient), Python (intermediate), Java (intermediate)

Languages

English(proficient), Chinese - Mandarin(native), Chinese - Cantonese(native), German(intermediate)

AWARDS AND SCHOLARSHIPS

Martha Davenport Heard Sophomore Prize in Mathematics

Wellesley College Math Department

May, 2020

Selected for excellence in mathematics coursework and contribution to the math department.

Introductory Chemistry Award

Wellesley College Chemistry Department

February, 2019

Selected for top performance in CHEM 120: Intensive introduction to chemistry.