

Mary (Vansuch) Silverglate

marysilverglate@gmail.com | <https://marysilverglate.com>

EDUCATION

Saint Louis University (Saint Louis, MO) Expected May 2023
Master of Arts, Mathematics

Johns Hopkins University (Baltimore, MD) August 2019
Master of Science, Education

The University of Chicago (Chicago, IL) June 2017
Bachelor of Arts, Statistics and Economics (with honors in major and general honors)

TEACHING EXPERIENCE

Saint Louis University (Saint Louis, MO) August 2021– Present
Graduate Teaching Assistant

- Instructor of record for the following undergraduate courses, each with approximately 30 students:
 - STAT 1100: Introduction to Statistics (Fall 2021 and Spring 2022)
 - MATH 1200: College Algebra (Summer 2022)
 - MATH 1320: Survey of Calculus (Fall 2022)
- Design lessons and assessments, give timely feedback, and hold office hours three times a week
- Created Desmos slides of STAT 1100 curriculum, making lecture more interactive
- Earned approximately 20% above average teaching evaluations compared to other mathematics instructors

Adjunct Faculty Instructor August 2020– May 2021

- Instructor of record for high school students earning college credit in 1818 dual enrollment program
 - MATH 1300: Elementary Statistics with Computers (Spring 2021)
- Designed culturally responsive curriculum, including incorporating real-world data
- Adapted instruction for hybrid learning in response to the COVID-19 pandemic

Saint Louis Community College (Saint Louis, MO) June 2022– July 2022
Adjunct Faculty Instructor

- Instructor of record for synchronous, online introductory algebra course
 - MATH 140: Intermediate Algebra (Summer 2022)
- Designed lessons and assessments for online format, evaluated student progress, and held office hours three times a week

Educational Testing Services (ETS) (Kansas City, MO) June 2022
Advanced Placement (AP) Statistics Exam Reader

- Graded national, standardized exam for high school students earning college credit
- Collaborated with team of college and high school instructors to ensure grading consistency

Lift for Life Academy High School (Saint Louis, MO) July 2019 – July 2021
Mathematics Teacher

- Created curriculum, designed lessons, and analyzed student data for the following courses, teaching in total approximately 100-120 students each year:
 - College Statistics
 - Geometry
 - Algebra 2
 - Algebra 1B
 - Algebra 1A
- Increased parent communication by 60%, resulting in highest algebra success rates on the math team
- Regularly incorporated technology such as Desmos into the classroom, and taught colleagues how to use Desmos slides to enhance instruction

District of Columbia Public Schools (Washington, DC)

August 2017 – June 2019

Mathematics Teacher

- Created curriculum, designed lessons, and analyzed student data for the following courses, teaching in total approximately 100-120 students each year:
 - 7th Grade Common Core Mathematics
 - 8th Grade Common Core Mathematics
 - 6th Grade Mathematics Intervention
 - 7th Grade Mathematics Intervention
 - 8th Grade Mathematics Intervention
- Developed curriculum for new blended learning “math intervention” classes for students who are over 3 grade levels behind utilizing ALEKS and i-READY software in addition to traditional in-class instruction
- Over 75% of students met or exceeded growth goals
- Collaborated with special education teachers regularly, as over half of students had documented disabilities

Teach for America (Washington, DC)

June 2017 – June 2019

Corps Member

- Selected from over 49,000 applicants to be a member of a corps of 3,500 recent graduates and transitioning professionals committed to teaching high-demand subjects in under-resourced schools

The University of Chicago (Chicago, IL)

April 2017 – June 2017

Undergraduate Teaching Assistant

- Provided feedback and graded weekly problem sets for Introduction to Microeconomics class of 76 students
- Held weekly office hours

WIT (Whatever It Takes) (Chicago, IL)

August 2016– June 2017

Statistics Director

- Compile statistics to evaluate program effectiveness and secure funding, including summarizing that we increase students’ scores by 1 standard deviation on average
- Created and presented presentation to enter WIT as a nonprofit into the Booth School of Business's College New Venture Challenge. We were selected as one of twelve start up companies and nonprofits to advance to the semi-finalist stage of the competition

ACT Mathematics Instructor

April 2014– June 2017

- Taught free ten-week course on ACT mathematics, improving student scores 15 percentile points on average
- Created curriculum, evaluated student progress, and communicated with students and parents

Chicago Public Schools (Chicago, IL)

February 2014 – June 2015

Teaching Assistant

- Taught middle and high school mathematics in small groups of 2-5 students
- Created curriculum and differentiated instructor for individual students’ needs

RESEARCH EXPERIENCE**Saint Louis University**, (Saint Louis, MO)

January 2022– Present

Master’s Thesis

- During the summer, collaborated with colleagues in the computer science department to analyze network traffic data
- Forecasted missing data with seasonal patterns in R
- Read and understood papers regarding Cheeger’s inequality, web traffic matrices, and algebraic graph theory
- Writing master’s thesis “Cheeger’s Inequality and Its Applications” under the direction of Darrin Speegle

The University of Chicago, (Chicago, IL)

September 2017 – June 2017

Honors Undergraduate Thesis

- Created original research question and identified feasible data
- Cleaned and merged data from both the National Center for Education Statistics and the Census in Stata
- Analyzed data using difference-in-difference techniques on both college-level and individual-level data
- Created theoretical model for college consumer behavior

- Wrote honors undergraduate thesis “The Effects of Mandatory and Free College Admission Testing on College Enrollment and Completion” under the direction of Melissa Tartari

Urban Innovation Analysis, (Chicago, IL)

January 2015 – June 2017

Research Assistant

- Used multi-variable regression techniques, causal inference, and descriptive statistics in Stata and SPSS
- Designed and conducted largely independent research project analyzing longitudinal data of voting patterns
- Collaborated with multi-disciplinary, international team of professors, graduate, and undergraduate students

Acumen, LLC, (Burlingame, CA)

June 2016 – August 2016

Data and Policy Analyst Intern

- Analyzed healthcare data and policy for consulting projects in Stata using descriptive and inferential statistics in Stata
- Compared the statistical accuracy and survey design of a variety of government surveys
- Communicated findings with stakeholders with academic and non-academic backgrounds

US Department of Commerce (Washington, DC)

June 2015 – August 2015

Office of the Chief Economist Intern

- Created descriptive statistics and organized data in Stata
- Communicated recent Office of the Chief Economist research with public in accessible language

The University of Chicago Harris School of Public Policy (Chicago, IL)

April 2014 – December 2014

Research Assistant

- Created Python scripts compiling and summarizing weather and pollution data in ArcGIS
- Wrote literature reviews summarizing recent environmental economics scientific studies

SERVICE

Saint Louis University (Saint Louis, MO)

Graduate Student Association Mathematics and Statistics Department Representative

August 2022– Present

- Advocate for the needs of graduate students in the mathematics department as the sole GSA mathematics department representative

Association for Women in Mathematics Founding Graduate Student President

August 2021– Present

- Founded student AWM chapter by recruiting 30 regular members in a single year and securing official campus recognition
- Manage leadership team of 4 graduate and undergraduate students
- Organize and lead campus-wide educational events regarding diversity in mathematics

Skew the Script (Free AP Statistics Curriculum Provider) (Remote)

March 2021– June 2021

Volunteer Contributor

- Created interactive Desmos slides as technological supplements to Skew the Script lessons.

Oeconomica (Undergraduate Economics Research Club) (Chicago, IL)

Treasurer

August 2016– June 2017

- Managed budget for undergraduate economics research club of approximately 50 members
- Assisted with other club logistics as needed, including running workshops on RStudio for undergraduate students and recruiting diverse club members

Education Cohort Leader

September 2015– May 2016

- Led group of 6 first and second year undergraduate students in reading and understanding academic economics of education papers
- Taught members of group to replicate research using Stata, including loading and cleaning data, compiling descriptive statistics, and interpreting regression analysis

Junior Economic Club Committee Founding Member

September 2015– May 2016

- Collaborated with community members to have first annual Junior Economic Club conference, where local high school students learn about college-level economics from current University of Chicago students
- First meeting had a turnout of approximately 100 local high school students

CONFERENCE PRESENTATIONS

- Midwest Political Science Association Conference** (Chicago, IL) April 2017
- Presented “Policy Impacts of Bohemia and Arts on Walking, Bicycle, and Public Transit Use in US Cities” at MPSA conference, co-authored with Hyesun Jeong and Terry Clark.

HONORS AND AWARDS

- Pi Mu Epsilon** (Saint Louis University) May 2022
- One of two graduate students awarded for outstanding achievement in mathematics
- Segal Education Award** (AmeriCorps) May 2019
- Earned educational scholarship for being a full-time AmeriCorps member from 2017-2019. AmeriCorps is a national volunteer service organization dedicated to helping underserved communities in the United States
- David S Hu Award** (The University of Chicago) June 2017
- Award for exemplary honors economics thesis
 - Earned by fewer than 5% of economics majors
- Jeff Metcalf Institute of Politics Summer Stipend Award** (The University of Chicago) June 2015
- Earned competitive stipend to complete summer internship at the US Department of Commerce

CERTIFICATIONS AND TECHNICAL SKILLS

Teaching Certifications

- Saint Louis Community College Online Teaching Certificate
- Missouri 5-12 Mathematics Initial Educator Certification
- District of Columbia 7-12 Mathematics Standard Educator Certification

Programming Languages

- R
- Stata
- SPSS
- Python

Learning Management Systems

- Canvas
- Blackboard
- Google Classroom
- Microsoft Classroom

Online Mathematics Tools

- Desmos, including slides and classifier language
- ALEKS
- i-Ready
- Khan Academy
- Deltamath
- Pearson MyMathLab
- WeBWorK
- MyOpenMath

Additional Technical Skills

- Microsoft Suite (Excel, Word, Powerpoint, Teams)
- Google Suite (Docs, Sheets, Slides)
- LaTeX