

# Mary (Vansuch) Silverglate

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## EDUCATION

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

Expected May 2023

*Master of Arts, Mathematics*

GPA: 3.90/4.0

**Johns Hopkins University** (Baltimore, MD)

August 2019

*Master of Science, Education*

GPA: 3.88/4.0

**The University of Chicago** (Chicago, IL)

June 2017

*Bachelor of Arts, Statistics and Economics (with honors in major and general honors)*

GPA: 3.53/4.0

## TEACHING EXPERIENCE

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

*Graduate Teaching Assistant*

August 2021– Present

- 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
- Tutor in mathematics resource center, helping with courses ranging from Intermediate Algebra to Calculus III (Spring 2023)

*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

**Bridges to Readiness** (Remote, USA)

*Mathematics Specialist*

February 2023– Present

- Designed 8 week curriculum for struggling students to excel on the SAT, intentionally ordering and scaffolding material so that they can meet college ready standards
- Designed 4 week curriculum for high-achieving students to excel on the SAT, intentionally scaffolding and ordering materials so that students internalize the math itself
- Created training materials for other tutors on best practices

*SAT Mathematics Tutor*

January 2023– March 2023

- Tutored students in SAT mathematics, customizing learning plans for their individual needs
- Communicate with a variety of stakeholders on student progress

**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)** (Remote, USA)

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:
  - 7<sup>th</sup> Grade Common Core Mathematics
  - 8<sup>th</sup> Grade Common Core Mathematics
  - 6<sup>th</sup> Grade Mathematics Intervention
  - 7<sup>th</sup> Grade Mathematics Intervention
  - 8<sup>th</sup> 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 instruction for individual students’ needs

## RESEARCH EXPERIENCE

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**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*

- Identified, 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

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**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**

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**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**

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**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 for Honors Economics Thesis (The University of Chicago)**

June 2017

- One of nine students chosen for award for exemplary honors economics thesis

**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**

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### **Teaching Certifications**

- Quality Matters Online Course Design Certification
- Saint Louis Community College Online Teaching Certification
- Saint Louis University College Online Teaching Certification
- 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