

EDUCATION

- **University of California, Berkeley** Berkeley, CA
PhD, Information Science *Expected June 2031*
- **University of Washington** Seattle, WA
MS, Applied and Computational Mathematics. GPA 3.89/4 *June 2022*
- **Pomona College** Claremont, CA
Bachelor of Arts in Mathematics, cum laude. Computer Science minor. GPA 3.84/4 *May 2017*
 - Thesis: *Möbius Inversion: From Posets to Categories*, advised by Vin de Silva. Text available on [github](#).

EXPERIENCE (ACADEMIC)

- **Center for Effective Global Action, Global Policy Lab, UC Berkeley** Berkeley, CA
Data Scientist, supervised by Dr. Joshua Blumenstock. *2022-2026*

Used statistics and machine learning to study the allocation of funds for social protection programs, including pricing optimal allocation of social-protection funds and investigating methods for estimating household-level standard of living in Malawi and Haiti.
- **University of California, Berkeley** Berkeley, CA
Research Associate, supervised by Dr. David Romps *2020*

Developed algorithms for mapping daily weather data between climates. Used statistical and numerical approaches to interpret non-stationary observations.
- **Claremont McKenna College** Claremont, CA
Research Assistant, supervised by Dr. Sam Nelson *2015*

Developed and evaluated algebraic knot invariants.

WORKING PAPERS AND PUBLICATIONS

- Sahoo, Roshni; Joshua Blumenstock; Paul Niehaus; **Leo Selker**; Stefan Wager. 2025. [What Would It Cost to End Extreme Poverty?](#) NBER Working Paper #34583; forthcoming.
- Kaestner, A.; Sam Nelson; **Leo Selker**. (2016). *Parity Biquandle Invariants of Virtual Knots*. *Topology and its Applications*, 209, 207–219. <http://doi.org/10.1016/J.TOPOL.2016.06.010>. *authors are ordered alphabetically*.

TEACHING/ACADEMIC MENTORSHIP

- **University of California, Berkeley** Berkeley, CA
Supervised 11 undergraduate research apprentices within the UC Berkeley URAP program *2026*
- **University of California, Berkeley** Berkeley, CA
Supervised a summer internship *2025*
- **Pomona College Department of Mathematics** Claremont, CA
Teaching Assistant: Combinatorics, Abstract Algebra, Algebraic Topology *2015-2017*

SELECTED TALKS

- *What would it cost to end extreme poverty?* Econometric Society Interdisciplinary Frontiers AI-ML, June 2026
- *Parity Biquandle Invariants of Virtual Knots* Knots in Washington, December 2015

OTHER EXPERIENCE

- **NewGrid, inc.** Somerville, MA (remote)
Software Engineering Consultant 2020 - 2021
- **Google** San Francisco, CA
Software Engineer; Authentication and Authorization Infrastructure 2017 - 2019
- **Ayasdi** Menlo Park, CA
Software Engineering Intern 2016

HONORS RECEIVED

- Honors on undergraduate thesis *Möbius Inversion: From Posets to Categories*, advised by Vin de Silva (2017)
- Benjamin J. Levy Memorial Prize in Mathematics (Pomona College faculty chosen, 2016)