Elliot S. Lee | optimization/ml for health, pre-med engineer.

Contact information:
academic: el3205@princeton.edu, elliotslee@berkeley.edu
achap: elliot@achap.org
personal website: elliotlee.info

Education:

B.E. Operations Research and Financial Engineering *summa cum laude*, minors in Global Health & Health Policy, Bioengineering, Applied & Computational Mathematics, & Quantitative Economics – ***Princeton University***

Relevant Courses: ORFE sequence (Calc I-III, Lin. Algebra, Optimization, Probability & Stochastic Systems, Differential Equations, Networks), Economics Math-Track Sequence (including Financial Mathematics), Pre-Medical Sequence (Biology, General Chemistry, Organic Chemistry, Biochemistry, Neuroscience), Global Health Policy Sequence [41/36 credits]

Advanced High School Diploma, *Thomas Jefferson High School for Science and Technology*

Experience:

Incoming Predoctoral Fellow to Professor David Chan, MD, PhD, & Research Statistician for the U.S. Department of Veterans Affairs [Berkeley, CA US]
University of California, Berkeley (Aug 2026 -)
Incoming predoctoral fellow with the Berkeley Haas Business School and the Berkeley Economics Department, RA on Department of Veterans Affairs projects on physician behavior, Medicare policy, and health outcomes. Planning coursework in real analysis and abstract algebra.

Student Researcher and Health Policy Consultant (antimicrobial supply chain development, economic and epidemiological modeling of VMMC health data)
Center for Health and Wellbeing Feature | ***Global Health Program Feature*** | **Working Session with the Central Medical Stores (2026/03)** | **Princeton University Senior Thesis Spotlight** [Gaborone, Botswana: photo credits Simon Tidimane, ACHAP] | Email elliot@achap.org for inquiries.
African Comprehensive HIV/AIDS Partnership (Jun - Aug 2025) [Gaborone, Botswana]
Contact: Mr. Lesego Busang (ACHAP, Gaborone), Dr. Bartolomeo Stellato (ORFE, Princeton University), Gilbert Collins (Center for Health and Wellbeing, Health Scholar specialized funding support, see below)
Support from government officials in the Central Medical Stores (including chief, Bene M. Anand Paramadhas) and the Ministry of Health (led by Chief Pharmacist).
Traveled across Botswana to interview physicians and health workers on national health supply chain policies that would specifically benefit their practice, used to inform model parameters. Redesigning policy-oriented and mathematically rigorous antimicrobial supply chain models for Botswana's Ministry of Health using OSRM-based distance matrices and economic/epidemiological data in light of the recent medical crisis.
Presented to government officials multiple times on work-related trips to Botswana in 2025 and 2026. Deliverable to be a research paper and usable application interface for the Botswana government, to be designed after thesis submission.

Research Assistant to Samya Aboutajdine (work on housing disaster resilience)
Princeton Economics Department (Jun - Aug 2025) [Princeton, NJ US]
Contact: Samya Aboutajdine (Department of Economics, Princeton University)

Examined housing disaster resilience by analyzing 10M+ building permits with FEMA risk data and regressing local resilience investments on FEMA grant flows, project aimed at better understanding and directing FEMA disaster resource allocation.

Research Assistant to Dr. Janet Currie (work on adolescent-oriented social program data collection and visualization)
Research Assistant for Working Paper 33632
Contact: Dr. Janet Currie (janet.currie@yale.edu, 203-432-3560, Department of Economics, Yale University)
Princeton Economics Department (Jan - Aug 2024) [Princeton, NJ US]
Cleaned and visualized adolescent social program data to support presentation on government program effectiveness.

Research Assistant to Dr. Giridara Gopal & Dr. Ramanan Laxminarayan (vaccination program cost-effectiveness)
Presentation
Contact: Dr. Ramanan Laxminarayan (rlaxmina@princeton.edu, 609-258-7050, Public and International Affairs, Princeton University)
One Health Trust (Jun - Aug 2023) [Bengaluru, KA India]
Modeled vaccination program cost-effectiveness at One Health Trust by implementing Markov chain simulations under Drs. Gopal and Laxminarayan.
Wrote and contributed to policy briefs on vaccine distribution for Pakistan, South Africa, Nepal, Uganda, and Nigeria. Created presentations as part of GARP for Tanzania, Zimbabwe, India, Kenya, South Africa, Vietnam, Mozambique, Laos, and Nigeria.

Research Assistant to Dr. Sylvain Chassang (weight adjustment for French transportation)
Contact: Dr. Sylvain Chassang (Department of Economics, Princeton University)
Princeton Economics Department (Oct - Dec 2024) [Princeton, NJ US]
Developed statistical weight adjustments for French transportation survey data to improve representativeness in empirical analyses.

Biostatistics Researcher (under supervision of Dr. Olivia Harringmeyer and Dr. John Storey)
Lewis-Sigler Center for Integrative Genomics (Oct 2024 -) [Princeton, NJ US]
Contact: Olivia Harringmeyer & Dr. John Storey (Lewis-Sigler Institute for Integrative Genomics, Princeton University)
Using SLiM to model fixed genetic mutation effects in populations under migration conditions. Working on research paper modeling chromosomal inversions under three-loci continent-island extension to Burger & Akerman (2003).

Teaching Assistant (PHY103: General Physics I)
Princeton Physics Department (Sep - Dec 2024) [Princeton, NJ US]
Contact: Dr. Isobel Ojalvo (Physics Department, Princeton University)
Hosted weekly study sessions.

Significant extracurricular activities:

Hopewell (Station 152) Emergency Medical Technician, Primary Contact at Princeton U.
Providing pre-hospital emergency care as a certified EMT on 911 calls (11 h/wk night shift). Hopewell FD point of contact at Princeton. Contact point for station recruiting from the Princeton undergraduate community pool.
Led Wintersession on narcan training in collaboration with local squad leaders in Princeton First Aid & Rescue.
GWUH quality observer to K. Gage Parr, M.D. and Brigham and Women's Hospital observer to Edward Laws, Jr. M.D.

Monitored patient safety and care quality compliance in major academic hospitals for a research study.

Deployments with Team Rubicon

Supported disaster response operations in Florida rural deployments through logistics, community relief, muckouts, public facility cleaning, and scene assessments.

American Whig-Cliosophic Society Dir. of Program Emeritus

Led 11 programming events for the nation's oldest collegiate debating society, including a new "Health x Public Policy" speaker series.

Residential College Advisor (RCA, Yeh College) & Community Living Advisor (CLA, Yeh College)

Mentored students and fostered community engagement in residential colleges. Mediated conflicts, hosted study breaks, and served as representative to the Residential College Leadership Council.

Yeh College Council

Jill's House / Second Story volunteer

Assisted children with disabilities and supported youth in transitional housing programs.

Matriculate Fellow

Served as advisor to low-income and disadvantaged pre-college students on the college application process.

Awards:

Joseph Clifton Elgin Prize, School of Engineering and Applied Sciences (SEAS), Princeton University - 2026

- *Awarded to a senior who has done the most to advance the interests of the School of Engineering and Applied Sciences in the community at large.*

The Procter and Gamble Prize, Operations Research and Financial Engineering, Princeton University - 2026

- *Awarded to a graduating senior who has written the best thesis in operations research.*

Beth N. Rom-Rymer '73 Senior Thesis Prize in Global Health and Health Policy, Princeton University - 2026

- *Recognizes the most outstanding theses written by students minoring in global health and health policy.*

Nominated to Sigma Xi - 2026

Health Scholar, Center for Health and Wellbeing, Princeton University - 2025 (1 of 6 selected by the Center for Health and Wellbeing)

Federal Reserve Challenge, National Champions (1st Place), representing Princeton University (Specialization: Labor Economics, 1 of 5 on team) - 2024

National Merit Scholarship Program (Leidos) - 2022

PACE National Quiz Bowl Championship, 1st Place - 2021

National History Bowl, 2nd Place - 2021

Virginia History Bee Champion - 2021

Tools:

R (fluent), Python (fluent), LaTeX (fluent), STATA (fluent), HTML, CSS, MATLAB, Java.