# Ethan K. Sun

Gig Harbor, WA | +1(415) 933-0972 | ethan.k.sun.26@dartmouth.edu | LinkedIn

# **Education**

Dartmouth College Hanover, NH

Bachelor of Arts - Economics Major Candidate on Honors Track

September 2022 - Present

• GPA: 3.72 / 4.00

• Brother of Psi Epsilon Chapter of Zeta Psi

#### **Tacoma Community College**

Tacoma, WA

Associate of Arts - Mathematics Specialization with High Honors

September 2020 - June 2022

• GPA: 3.98 / 4.00

• SAT: 1580 (Math: 800, Reading: 780). SAT Subject Test Math Level II: 800

- President of Phi Theta Kappa International Honors Society
- · Running Start dual-enrollment program. Earned Associate of Arts degree in mathematics during high school

# **Experience**

#### **Associate Editor for the Dartmouth Law Journal**

Hanover, NH

Dartmouth College

April 2025 - Present

 Review manuscripts submitted to the Dartmouth Law Journal and perform micro- and macroedits and ensure proper citation in accordance with the Bluebook

## **President of Dartmouth Economic Research Scholars**

Hanover, NH

Department of Economics at Dartmouth College

April 2025 - Present

Serve as a liaison between DERS students, faculty, and alumni. Organize and facilitate meetings, coordinate
events, and secure funding for panels, colloquiums, workshops, and distinguished guest lectures to promote
undergraduate economic research and connect students with professors and professionals

## **Economics Research Assistant**

Hanover, NH

Principal Investigator - Erzo F.P. Luttmer

September 2024 - March 2025

- Awarded Dartmouth Economic Research Scholar and James O. Freedman Presidential Scholar with \$3,200 grant for this role. Worked on The Dartmouth Professor in Economics Erzo F.P. Luttmer's team to value human lives based on respondents' choice between vignettes of life stories where life-time income and age of death are randomized.
- Created literature reviews, tested survey data to ensure randomizations were implemented correctly and that respondent responses were coded accurately, produced high-quality exhibits based on data analyzed by Professor Luttmer or other senior members of the research team, and helped proofread, edit, and format the paper

#### **Economics Teaching Assistant**

Hanover, NH

Faculty - Maura Doyle, Diego Ramos-Toro

Fall 2024, Spring 2025

- ECON 21 (Microeconomics) Held three hours of weekly office hours for a class of 60 students to ask questions about the course material
- ECON 01 (The Price System: Analysis, Problems, and Policies) Graded problem sets, exams, and held weekly office hours for a class of 90 students to ask questions about the course material

## **Music Teaching Assistant**

Hanover, NH

Faculty - Michael Zsoldos

Fall 2023, Spring 2024

 MUS 01 (Beginning Music Theory) Teaching Assistant - Held weekly piano lessons for scales, dynamics, chords, theory, and a simple piece and held weekly office hours for a class of 11 students to ask questions about the course material

## **Pharmaceutical Engineering Research Assistant**

Hanover, NH

Principal Investigator - Xin Qi

March 2023 - November 2023

- Awarded URAD Scholar and William H. Neukom 1964 Scholar with \$2,400 grant (\$1,200 each at the time of award) for this role. Worked in Assistant Professor Xin Qi's Qi Lab at Dartmouth and collaborated with pharmaceutical companies to develop antibodies to target Interleukin-33, a protein in the IL-1 family of cytokines known to be associated with various inflammatory and allergic conditions
- Analyzed data by utilizing RCSB, VMD, Pymol, and AlphaFold to visualize and analyze the structure of
  antibodies targeting Interleukin-33, then used GROMACS, Slurm, and Python to perform molecular dynamic
  simulations for data analysis and studying of their properties and binding efficacy to Interleukin-33

# **Publications & Presentations**

- Sun, Ethan, Long-Term Effects of the ACA Medicaid Expansions (March 15, 2025). Available at SSRN: https://ssrn.com/abstract=5197610 or http://dx.doi.org/10.2139/ssrn.5197610. [pdf]
- Sun, Alan, **Ethan Sun**, and Warren Shepard. "Algorithmic Phase Transitions in Large Language Models: A Mechanistic Case Study of Arithmetic." Paper presented at ATTRIB @ NeurIPS 2024 workshop, Vancouver, BC, Canada, December 14th, 2024. [pdf]

## **Honors & Awards**

#### James O. Freedman Presidential Scholar

Hanover, NH

Dartmouth College Undergraduate Advising and Research

May 2024

• Prestigious, GPA-based two-term undergraduate research program with \$3,200 grant

## **Dartmouth Economic Research Scholar**

Hanover, NH

Dartmouth College Department of Economics

March 2024

• Competitive program designed to support Presidential Scholars who are majoring in economics and provides additional mentoring and support to students with strong potential in economics research

## William H. Neukom 1964 Scholar

Hanover, NH

The Neukom Institute for Computational Science

August 2023

Selective program that provides a \$1,600 grant to enrolled undergraduates engaged in faculty-advised research
in the development of novel computational techniques as well as the application of computational methods to
problems in the Sciences, Social Sciences, Humanities, and the Arts

## **Undergraduate Research Assistantships at Dartmouth Scholar**

Hanover, NH

Dartmouth College Undergraduate Advising and Research

March 2023

• Competitive program that provides a \$1,600 grant intended to introduce students to research with priority given to sophomores and juniors (received award as a freshman)

## **Citations for Meritorious Performance**

Hanover, NH

Dartmouth College

Spring 2023, Summer 2024

- Probability, Research Associate Linh Huynh
- Introduction to Programming and Computation, Albert Bradley 1915 Third Century Professor in Computer Science Andrew Campbell
- Italian Briefs, Dartmouth Faculty Michael Wyatt

## **Skills**

• Python, Stata, LaTeX, Slurm, Excel, Word