

# JACOB LIGHT

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## EMPLOYMENT

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**Hoover Fellow**, Hoover Institution

*2024 - present*

## EDUCATION

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**Stanford University**

*2018 - 2024*

Ph.D. in Economics

- Fields: Labor and Public Economics
- Dissertation: Essays in the Economics of Education

**University of Michigan**

*2011 - 2015*

Bachelor of Science, Mathematics and Economics (Highest Honors)

- Summa cum laude, Phi Beta Kappa (inducted as a junior)

## PUBLISHED WORK

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**Long-run Trends in the U.S. SES-Achievement Gap**, (with Eric Hanushek, Paul Peterson, Laura Talpey, and Ludger Woessmann), Fall 2022, *Education Finance and Policy*

## RESEARCH IN PROGRESS

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**Student demand and the supply of college courses** [[Working paper](#)]

In an era of rapid technological and social change, how do universities adapt? To examine this, I extracted the information contained in the course catalogs of over 700 US colleges and universities, observing courses dating back to 1998. When there are changes in student demand, universities adjust course quantity substantially less than one-for-one, particularly in fields experiencing declining demand. Research universities (R1) are somewhat more responsive in expanding high-demand fields and less research-intensive universities in reducing declining fields. Using Natural Language Processing, I further show that while the content of existing courses remains largely unchanged, newly created courses incorporate topics related to social justice and job skills. R1 and Liberal Arts universities exhibit the most pronounced content changes, with a notable increase in emphasis on social justice.

**Anatomy of labor market distress** (with Eric Hanushek, Simon Janssen, and Lisa Simon) [[Working paper](#)]

Earnings losses after mass layoffs are highly skewed: a small number of workers experience catastrophic losses, while most workers recover quickly. This paper documents the heterogeneity in earnings losses after mass layoffs and the adjustments driving these differences. We study workers from firms in West Germany that closed between 2000-2005. For each laid-off worker, we create a synthetic control from similar workers with matching earnings trajectories who weren't laid off during that period. Which workers experience the greatest losses is not a priori predictable based on fixed characteristics, but is associated with post-layoff adaptability, like switching professions or relocating. Consequently, pre-layoff targeted policies to assist these workers might not be as effective as post-layoff interventions.

**Instructor value-added in higher education** (with Merrill Warnick and Anthony Yim) [\[Working paper\]](#)

Estimating post-secondary instructors value-added is challenging because college students select their courses and instructors. In the absence of sound measures of value-added, universities use subjective student evaluations to make personnel decisions. In this paper, we develop a method to estimate instructor value-added at any university. The method groups together students who have previously taken similar courses and estimates value-added based on differences in outcomes for students in the same group and same course who have different instructors. Using a unique policy at a large public university in Indiana, we show that our non-experimental method controls for selection just as well as methods that exploit conditional random assignment of students to courses. We next show that our method reduces forecast bias in a wider variety of institutions using data from nearly all public universities in Texas. We find that individual instructors matter for students future grades and post-college earnings in many subjects and courses. On average, moving to a 1 standard deviation better instructor would increase a students next semester GPA by 0.13 points, and earnings six years after college entry by 17%. Strikingly, value-added is only weakly correlated with student evaluations. An instructor retention policy based on value-added would result in 2.7% higher earnings for students attending Texas universities.

**PRESENTATIONS**

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- 2025 (including scheduled):** AEFPP, Colloquium on Personnel Economics  
**2024:** Hoover Economic Policy working group, University of Zurich, Vanderbilt University, CUNY Higher Education virtual workshop, Southern Economic Association  
**2023:** All-California Labor Economics Conference, CSQIEP Virtual Seminar, Stanford Applied Economics Workshop  
**2022:** AERA Annual Meeting, Stanford Applied Economics Workshop

**GRANTS, AWARDS, AND FELLOWSHIPS**

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<b>Leonard W. Ely and Shirley R. Ely Graduate Student Fellowship</b>	<i>2023</i>
<b>Stanford IRiSS Dissertation Fellowship \$11,000</b>	<i>2023</i>
<b>NAEd/Spencer Dissertation Fellowship Semifinalist and Alternate</b>	<i>2023</i>
<b>Stanford H&amp;S Graduate Research Opportunities Grant (with Merrill Warnick) \$5,000</b>	<i>2023</i>
<b>George Shultz Graduate Research Fellowship (with Merrill Warnick) \$3,000</b>	<i>2022</i>
<b>Patricia Liu McKenna and Kenneth McKenna Graduate Fellowship</b>	<i>2021-22</i>
<b>Stanford Outstanding Teaching Award</b>	<i>Spring 2021</i>
<b>George Shultz Graduate Research Fellowship \$12,500</b>	<i>2021</i>
<b>Stanford Outstanding Teaching Award</b>	<i>Winter 2021</i>
<b>Stanford IRiSS Research Data Grant \$2,000</b>	<i>2020</i>
<b>Stanford IRiSS Center for Computational Social Science Grant \$1,500</b>	<i>2020</i>
<b>Stanford Economics First-Year Ph.D. Fellowship</b>	<i>2018</i>
<b>NSF Graduate Research Fellowship, Honorable Mention</b>	<i>2018</i>
<b>Ferrando Honors Prize, University of Michigan Economics Department</b>	<i>2015</i>
<b>Sims Honors Scholarship, University of Michigan Economics Department</b>	<i>2015</i>
<b>Gerald Ford Public Service Prize, University of Michigan</b>	<i>2015</i>
<b>Outstanding Achievement in Math, University of Michigan Math Department</b>	<i>2015</i>

**TEACHING AND RESEARCH ASSISTANCE**

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<b>ECON 43: Introduction to Financial Decision-Making</b>	<i>Spring 2021</i>
Outstanding TA Award	
<b>ECON 144: Family and Society</b>	<i>Winter 2021</i>

Outstanding TA Award

**ECON 1: Principles of Economics**  
**Research Assistant for Professor Caroline Hoxby**

*Fall 2020*  
*2019 - 2020*

## PROFESSIONAL EXPERIENCE

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**Research Engineering Intern - Core Data Science, Meta**

*2021*

Menlo Park, CA

**Senior Research Analyst, The Brattle Group**

*2015 - 2018*

Washington, DC

## REFEREEING

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*Journal of Labor Economics*

## SERVICE

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**Advanced Tax Preparer**, IRS Volunteer Income Tax Assistance

*2015 - 2021*

**President**, Stanford Graduate LGBTQ+ Affinity Group (GradQ)

*2019 - 2022*

**Applied Economics Workshop Coordinator**, Stanford Economics Department

*2020 - 2022*

**Social Chair, Admitted Student Day Liaison**, Stanford Economics Department

*2019 - 2020*

## CITIZENSHIP

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United States