Yoav Goldstein

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Email: yoav.goldstein1@mail.huji.ac.il
Citizenship: Israel

Research interests

Education Economics, Labor Economics, Health Economics, Behavioral Economics

Education

The Hebrew University — Jerusalem, Israel
MA in Economics, GPA: 95.5 — 2021 (Expected)*
Thesis: Emotional Events and Physician Behavior (98)
Relevant coursework: Machine Learning for Economists (100), Econometrics A (96) & B (97)

BA Philosophy, Politics and Economics, GPA: 92.9 *Magna cum Laude* — 2019

Honors and scholarships

Bogen International Grduate Program Felowship (The Hebrew University) — 2019-Present
Great Honor Award for Excellency in Economics (The Hebrew University) — 2019
The Encouragement Award (The Hebrew University) — 2019
Dean's List (The Hebrew University) — 2019

Research

Gifted Children Programs' Long-Term Impact: Higher Education, Earnings, and the Knowledge Economy
with Victor Lavy. *Work in Progress.*

Emotional Events and Physician Behavior
with Ity Shurtz, Dan Zeltzer. *Work in Progress.*

Realization of low Probability Clinical Risks and Physician Behavior: Evidence from Primary Care Physicians
with Ity Shurtz. *Submitted.*

Teaching

TA, Department of Economics (The Hebrew University)
Introduction to Econometrics, BA — 2020-2021
Economic History, BA — 2019-2021

TA, Department of Philosophy (The Hebrew University)
Introduction to Logic, BA — 2019-2020

Misc.

Programming: R, Stata, Matlab.
Languages: Hebrew (mother), English (fluent).
Playing in Israel's national soccer league for the Hebrew University's team.

* Next year I will join the PHD program in Tel-Aviv University, after finishing two years of graduate studies in the Hebrew University.

Interest in AI

I am working on two research projects on behavioral aspects of physician decision making. In both projects, we incorporate machine-learning techniques.

In the first project (joint with Ity Shurtz), we examine whether primary care physicians alter their clinical decision-making following realizations of low probability risks-– events of colon cancer among their patients. We find that physicians increase their patients' use of colonoscopy tests substantially during the first three months following such events. As part of this research, we implement a random forest algorithm to measure the ex-ante risk for colon cancer for each patient, and we show that events that involve low-risk patients generate a stronger physician response, indicating that the surprise created by the event is important in drawing physicians' attention and inducing their response.

In the second research project (joint with Ity Shurtz and Dan Zeltzer), we study the response of primary care physicians to emotional events—- encounters with patients recently diagnosed with cancer. We show that physicians increase their prescriptions of diagnostic tests, including tests unrelated to cancer, for about an hour after the event. In this case, we implement a gradient boosting algorithm to assess whether this increase in prescriptions comes with a change in decisions' accuracy (following the methodology of Currie and Macleod, 2017). Interestingly, we find that emotional events lead to more accurate testing.

I am interested in incorporating machine learning techniques in my research, both in the fields of Labor and Health Economics. Specifically, I am interested in applying state of the art machine learning techniques to examine the role of signaling in the returns to education (building on the frameworks of Lange, 2007 and Lange et al., 2019).

References:

- Aryal, Gaurab, Manudeep Bhuller, and Fabian Lange. Signaling and employer learning with instruments. No. w25885. National Bureau of Economic Research, 2019.
- Currie, Janet, and W. Bentley MacLeod. "Diagnosing expertise: Human capital, decision making, and performance among physicians." Journal of labor economics 35.1 (2017): 1-43.
- Lange, Fabian. "The speed of employer learning." Journal of Labor Economics 25.1 (2007): 1-35.