# Ilan Morgenstern

**Email:** ilanmor@stanford.edu

**Citizenship:** Mexican and Polish
**Languages:** Spanish, English and Hebrew


## Education

- **Stanford Graduate School of Business** — Palo Alto
  *Ph.D. in Operations, Information and Technology* — *2018 - present*
  - Advisors: Kostas Bimpikis and Daniela Saban.

- **Instituto Tecnológico Autónomo de México (ITAM)** — Mexico City
  *Bachelor degrees in Applied Mathematics and Economics* — *2010 - 2015*
  - Graduated with the highest honors and as the top-ranked student from both programs.
  - GPA: 9.87/10 (applied mathematics) and 9.78/10 (economics).
  - Thesis advisor: Diego Domínguez.

## Publications and Working Papers

- Bimpikis, K., Morgenstern, I., & Saban, D. (2021). Data tracking under competition. *Submitted to Manangement Science.*

- Morgenstern, I., & Domínguez, D. (2019). A characterization of the random arrival rule for bankruptcy problems. *Economics Letters*, 174, 214-217.

## Professional Experience

- **McKinsey & Company** — Mexico City
  *Business Analyst* — *2016 - 2018*
  - Collaborated in the creation of an advanced analytics platform for a large consumer goods company, which has enabled data-driven decision making in their revenue management area, based on the use of econometric models and machine learning algorithms.
  - Identified improvement opportunities to reduce inventory costs by 20-25% across five production plants for an automotive parts manufacturer, using statistical models to optimize target stocks.

- **Instituto Nacional Electoral**[1] — Mexico City
  *Quick-count Committee Collaborator* — *2015*
  - Developed a voting trends forecasting model based on Bayesian statistics along with Prof. Raúl Rueda (UNAM), as part of the quick-count exercise conducted by the Institute in the 2015 Mexican national election. The results of our model were communicated to the public a few hours after voting stations closed by the Instutute's chief counsellor.

- **The Abdul Latif Jameel Poverty Action Lab (J-PAL)** — Mexico City
  *Research Assistant for Prof. Enrique Seira* — *2012 - 2015*
  - Analyzed the results of a randomized controlled trial that measured the impact of offering various payment plans in pawnshop loans, and compared them with a simulation model to contrast observed vs. "rational" behavior.

- **Institute of Pure and Applied Mathematics - UCLA** — Los Angeles
  *Project Manager in the RIPS program (Research in Industrial Projects for Students)* — *2014*
  - Created an algorithm to match genocide survivors' video testimonials from the USC Shoah Foundation with related Wikipedia articles in order to display relevant information next to the video clip, complementing the users' learning experience.
  - Served as the team's project manager. The team was composed of four students, an academic mentor, and a technical mentor from the USC Shoah Foundation.
  - Presented a poster about this project in the 2015 Joint Mathematics Meetings and received an outstanding presentation award.

[1] Mexican Government agency responsible for organizing federal elections.

## Awards & Honors

- **The Robert J. and Doreen D. Marshall Scholarship Fund Fellowship** — Palo Alto
  *Stanford Graduate School of Business* — *2018*
- **Ex-ITAM thesis award** — Mexico City
  *Instituto Tecnológico Autónomo de México* — *2017*
  - Prize awarded annually to ITAM's best undergraduate theses. I received first place and honorable mention for the applied mathematics and economics programs respectively.
- **Sotero Prieto thesis award** — Aguascalientes, Mexico
  *Mexican Mathematical Society* — *2016*
  - Prize awarded to the best mathematics undergraduate theses in Mexico every year. I received an honorable mention for my thesis on bankruptcy problems.
- **IMEF-EY research prize** — Monterrey, Mexico
  *Mexican Institute of Finance Executives (IMEF)* — *2016*
  - Prize awarded to distinctive research in economics or finance by the Mexican Institute of Finance Executives (IMEF) and EY Mexico. I received a special mention in the undergraduate thesis category.
- **Outstanding poster presentation award** — San Antonio
  *Joint Mathematics Meetings Poster Session* — *2015*
- **Scholarship for Academic Excellence** — Mexico City
  *ITAM* — *2010*
- **First place in the state Math Olympiad** — Mexico City
  *Universidad Nacional Autónoma de México (UNAM)* — *2008*

## Conferences

- **INFORMS annual meeting**
  *Presentation* — *2019, 2020*
- **INFORMS Revenue Management and Pricing Conference** — Palo Alto
  *Participant* — *2019*
- **Marketplace Innovation Workshop** — Palo Alto
  *Participant* — *2019*
- **26$^{\text{th}}$ Summer School in Economic Theory** — Jerusalem
  *Participant* — *2015*
- **Joint Mathematics Meetings** — San Antonio
  *Poster presentation* — *2015*

## Other Activities

- **Management Science**
  *Reviewer* — *2019-2021*
- **ACM Conference on Economics and Computation**
  *Reviewer* — *2020-2021*
- **Gaceta de Economía (ITAM's economics journal)**
  *Editor* — *2015*
- **Laberintos e Infinitos (ITAM's mathematics magazine)**
  *Collaborator and writer* — *2013-2015*

Application to the 2021 NBER Doctorial Workshop on the Economics of Artificial Intelligence

Ilan Morgenstern
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I'm a third-year student in the Operations, Information and Technology department at Stanford GSB, where I'm advised by Profs. Kostas Bimpikis and Daniela Saban. I'm interested in conducting research on the intersection of economics and operations research related to data privacy and, more broadly, the effect of new technologies and artificial intelligence in society.

Since last year's workshop, I finished writing a paper titled *"Data Tracking under Competition"* with Profs. Bimpikis and Saban. In this work, we analyze price competition and market dynamics between two firms: one long-lived that can exploit consumer data obtained today for price discrimination in the future, and one short-lived that has no incentives to store consumer data and serve as privacy-preserving alternative for consumers. We study this market in two different contexts: with myopic and with forward-looking consumers. The paper can be found in the following link: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3808228

This work is related to the literature on the economics of privacy and data regulation (e.g., Goldfarb and Tucker 2011, 2012; Acquisti et al. 2016; Bonatti and Cisternas 2020; Ali et al. 2020), which are relevant in the community of the economics of AI. I had the privilege of attending the NBER Doctoral Workshop on the Economics of Artificial Intelligence last year; it was a great opportunity for me to connect with colleagues with similar interests and get to know the latest research in the field. I hope you can consider my application to attend this year as well, as it would help me further develop my knowledge of the field, network with researchers with similar interests, and potentially start new collaborations.