

Rigel Galgana

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EDUCATION

- **Massachusetts Institute of Technology** Cambridge, MA, USA
PhD in Operations Research Sept 2022 - May 2026 (Anticipated)
- **Brown University** Providence, RI, USA
GPA: 3.87; Magna Cum Laude; Departmental Honors in Applied Mathematics-Computer Science Sept 2016 - May 2020
Bachelors of Science in Applied Mathematics-Computer Science and Mathematics-Economics

PUBLICATIONS AND WORKING PAPERS

- **A Dynamic Program for Computing the Joint Cumulative Distribution Function of Order Statistics (ACDA21):** Developed efficient algorithms to compute joint order statistic distributions of multiple homogeneous populations of random variables. (my Greenwald, Cengke Shi, Takehiro Oyakawa)
- **A Dynamic Program to Compute Joint Distribution of Order Statistics on Graphs (Working):** Developed efficient algorithms to compute joint order statistic distributions of dependent random variables. (Amy Greenwald)
- **Efficiently Sampling Order Statistics (Working):** Developed sublinear algorithms to sample order statistics (Cyrus Cousins)

WORK EXPERIENCE

- **AQR Capital Management** Greenwich, CT, USA
Portfolio Implementation Analyst July 2020 - Feb 2022
 - **Responsibilities:** Oversaw Macro Alternative Premia systematic fund implementations; Systematized and analyzed merger arbitrage discretionary strategies; Improved fixed income risk hedging procedure and transaction cost model

RESEARCH EXPERIENCE

- **Massachusetts Institute of Technology** Cambridge, MA, USA
Graduate Research Assistant Sept 2022-Present
 - **Negin Golrezaei:** Analyze efficiency and properties of various multiunit auction formats to allocate Carbon licenses
- **Brown University** Providence, RI, USA
Research Assistant June 2018 - May 2020, Feb 2022 - Aug 2022
 - **Amy Greenwald, E-GLAMOR Lab:** Developed algorithms to compute order statistic distributions as they pertain to revenue optimization of auctions. Simulated and analyzed welfare of various queueing mechanisms for office hour allocations
 - **Cyrus Cousins:** Developed efficient order statistic sampling algorithms
 - **Serdar Kadioglu:** Compared ML guided SAT solvers against traditional heuristic portfolios

TEACHING EXPERIENCE

Spring 2020: Prescriptive Analytics (Brown University, Head TA)
Spring 2020: Algorithmic Game Theory (Brown University, Undergraduate TA)
Fall 2019: Design and Analysis of Algorithms (Brown University, Undergraduate TA)
Spring 2019: Probability & Statistics, Applications (Brown University, Undergraduate TA)
Fall 2018: Intro to Probability, Statistics, Machine Learning (Brown University, Undergraduate TA)
Fall 2018-Spring 2020: Department of Applied Mathematics Advising (Brown University, Undergraduate Peer Advisor)

HONORS AND AWARDS

2020: Computing Research Association, Undergraduate Researcher Award (H. Mention)
2020: Sigma Xi nomination and Applied Math-Computer Science departmental honors
2019: Brown University UTRA, Undergraduate Teaching and Research Award (teaching)
2018: Brown University UTRA, Undergraduate Teaching and Research Award (research)