

# Rigel Galgana

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<https://GalganaR.github.io/>

+1-781-571-8354

## EDUCATION

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- **Massachusetts Institute of Technology** Cambridge, MA, USA  
*PhD in Operations Research, advisor Negin Golrezaei* 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  
*BSc in Applied Mathematics-Computer Science and BA in Mathematics-Economics*

## PUBLICATIONS AND WORKING PAPERS

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- **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. (Amy 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 (Under Review):** Developed sublinear algorithms to sample order statistics (Cyrus Cousins)

## WORK EXPERIENCE

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- **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

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- **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

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- 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

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- 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)