



# Andreea Georgescu

I am looking for Data Science / Product opportunities at early to mid-stage (50-200 employees) companies building data driven products.

Strong background in math and hands on experience in all aspects of delivering data driven solutions & products.

## SKILLS

Data Science, Quantitative Research  
Applied Mathematics  
Project Management

Python, Julia, R  
SQL (MySQL, Hive)  
Microsoft Office

English (full working proficiency)  
Romanian (mother tongue)

Bouldering (V7-9), Climbing (5.12)  
Contract Bridge

## EDUCATION

**Massachusetts Institute of Technology,** 9/17 –  
Cambridge, MA 12/20

**Masters** in Operations Research  
PhD level classes and research.

**Stanford University,** Stanford, CA 9/13 –  
**BSc with Honors** in Mathematics 6/17

**Mihai Viteazul National College,** 9/09 –  
Bucharest, Romania 6/13

## COURSEWORK

Machine Learning, Inference and Information,  
Optimization, Stochastic Processes, Operations  
Management, Game Theory, Market Design,  
Networks, Organizations Management.

## AWARDS

- MIT Fintech Challenge, 2nd place 2/19
- Stanford Math Undergraduate Research Award 6/17
- Phi Beta Kappa 6/17
- National Romanian Mathematics Olympiad – bronze medalist in 4/12,  
2012, silver medalist in 2013. 4/13

## VOLUNTEERING

**Covid-19 Policy Alliance,** Data Scientist present  
Stanford Applicants Interviewer 1/18 –  
present

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## DATA SCIENCE EXPERIENCE

**MIT,** Cambridge, MA – **Graduate Research Assistant** 9/17 –  
Working with Prof. Retsef Levi and Prof. Vivek Farias on choice models present  
and assortment optimization, and supply chain optimization.

### Non-parametric synergistic choice models.

- Designed a synergistic choice model, as a natural extension of the MNL model, which allows products to create ‘synergies’, causing customers to reverse their preference between two products, based on the other items displayed.
- Built an efficient and light-weight estimator showing significant improvement in performance on the IRI Dataset (average loss decrease: in-sample by 4%, out-of-sample by 10%).

### Supply chain optimization for US retailer.

- Main liaison between executives and Sloan and in charge of the data science (coordinating LGO Masters student who is on sight).
- Took project from scoping phase to data sourcing and analysis – created pipelines for large datasets (millions of rows), designed metrics to understand the system and interaction between different levers, and identified first strategy that can be implemented and should drive 10% increase in main KPI. Currently working on implementing a pilot.

### Airbnb, San Francisco, CA – Data Science Intern (Deferred)

- Airbnb Internship 2020 Recipient (deferred due to COVID-19)*

### Bridgewater Associates, Westport, CT – Investment Associate Intern 6/16 –

- Worked in the research department – currency team, using 8/16  
quantitative methods.

### Nomis Solutions, San Bruno, CA – Business Analyst Intern 6/15 –

- Successfully introduced a new feature to the company predictive 8/15  
model by coding the algorithm I created (in Hive) to fit the general  
data architecture and creating a fully automatized pipeline.

## DATA SCIENCE PROJECTS

### Project links and more details on LinkedIn

### Fast estimation of discrete mixtures of MNL models 3/19 –

- Developed seeding technique improving convergence speed of the 9/19  
EM estimation algorithm (empirically, the improvement is from  
linear to exponential convergence).

### Reducing high no-show rates impact in ambulatory practices 9/18 –

- Led data analysis and research methodology on consultancy project 2/19  
for the executives of a large hospital in Boston.
- Provided strategy to increase provider utilization (66% to 83%)  
without hurting patient satisfaction (waiting times).

### Speech Diarization in Monty Python Sketches 9/18 –

- Performed speech diarization using atypical data – the averaged 12/18  
spectrogram data for the time interval of any line in the sketch.