# MALEK BEN SLIMAN

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## EDUCATION

**Columbia University**                                                                                          New York, NY
- **PhD in Quantitative Marketing**, Columbia Business School                                  May 2020
  - Dissertation: "The Art of Art Valuation"
  - AMA-Sheth Foundation Doctoral Consortium Fellow
- **MS in Operations Research**, Columbia Engineering School                                  Dec 2014

**Ecole Centrale Paris**                                                                                          Paris, France
- **MS in Engineering**: Industrial Engineering                                                        Jun 2013

**Lycée Louis le Grand**                                                                                          Paris, France
- **Classes préparatoires**: Mathematics and Physics                                              Jun 2011
  - Awarded 5-year Excellence Scholarship by French Government

## DOCTORAL WORK

- **Coursework:** Multivariate Statistics, Economics, Econometrics, Graph Theory, Bayesian Methods, Mathematical and Empirical Models in Marketing, Optimization, Consumer Behavior, Industrial Organization, Causal Inference
- **Teaching experience**
  - Designed curriculum and teaching material for 1,500+ graduate (MBA, MS, PhD) students in: Pricing Strategies, Marketing Strategy and Models, Multivariate Statistics, Digital Marketing
  - Launched a MOOC edX Marketing Analytics class currently starting its 5th iteration
  - Prepared and taught tutorials on SAS and R programming

## PROJECTS

**Dissertation: the art of art valuation**
- Received Luxury Education Foundation Award 2019
- Develop an art valuation model based on paintings' aesthetics, novelty, influence, and artists' historical market value
- Scraped and preprocessed 140,000+ fine art auction records containing text and images (ie, unstructured data)
- Extracted key visual features in all paintings by building machine learning models (eg, variational autoencoder)
- Quantified novelty and influence by using social network theories and analysis tools to create an art network

**Increasing the virality of information in online and offline social networks**
- Created techniques to identify users with above-average number of followers (ie, influencers)
- Developed strategy to generate the widest spread of information by developing theoretical bounds
- Achieved a twentyfold improvement through simulations on a Twitter dataset
- Wrote two papers, under review and presented at *Marketing Science (2018)*

**Measuring the practicality of marketing research from academia**
- Designed a Relevance-to-Marketing (R2M) index using NLP techniques (eg, topic modeling, word embeddings) to measure the practicality of academic papers
- Scraped and preprocessed 10,000+ papers published in top marketing, economics, and psychology journals
- Constructed and distributed surveys to marketing managers to assess the R2M index's validity
- Wrote paper, under review and presented at *Theory+Practice in Marketing (2017, 2018)*

**Creating dynamic website interfaces for online retailers, increasing consumer satisfaction and revenue**
- Developed a method to dynamically customize the products and features displayed after each user's clicks
- Estimated customer preferences using bayesian nonparametric tools (eg, Dirichlet process)
- Paper under review and presented at *Marketing Science (2019)* and at *Data Science Institute Poster Session (2019)*

## SKILLS & HOBBIES

- **Computer skills:**
  - Programming Languages: Python, R, Matlab
  - Data Analytics and Databases: Keras, Tensorflow, sklearn, gensim, SQL
  - Data Visualization: ggplot, matplotlib, Tableau
- **Languages:** French, Arabic, Spanish (basic)
- **Hobbies:** Tennis, soccer, wine tasting and mixology