MIT Sloan CV Format

Curriculum Vitae

Name: Ali Aouad

Sloan Department (Group):
Operations Management

Place of Birth:
Morocco

Citizenship: France, Morocco
Immigration Status: H1B

I. Education

PhD, Operations Research	MIT Sloan	2017
MSc, Applied Mathematics	Ecole Polytechnique	2013
BSc, Applied Mathematics	Ecole Polytechnique	2011

II. Title of Doctoral Thesis and Name of Thesis Advisor

Assortment and Inventory Optimization: From Predictive Choice Models to Near-optimal Algorithms
Vivek Farias and Retsef Levi

III. Principal Field(s) of Interest

Supply Chain and Revenue Management, Matching Market Design, Algorithms, Stochastics, Optimization, Public and Societal Operations, Operations Management (OM) for Low- and Middle-Income Countries

IV. Name and Rank of Other Sloan Faculty in Same Field

Steven Eppinger	Professor
Vivek F. Farias	Professor
Charles Fine	Professor
Daniel Freund	Associate Professor (without Tenure)
Negin Golrezaei	Associate Professor (with Tenure)
Retsef Levi	Professor
Thodoris Lykouris	Assistant Professor
Georgia Perakis	Professor
Nikos Trichakis	Professor
Y. Karen Zheng	Professor

V. Non-MIT Employment

Employer	*Position*	*Start*	*End*
London Business School	Associate Professor (with Tenure)	05/2024	08/2024
London Business School	Assistant Professor	08/2018	04/2024
Uber Technologies	Applied Scientist	08/2017	08/2018
Numerator (ex-Infoscout)	Data Scientist	06/2015	08/2015
Boston Consulting Group	Visiting Associate	09/2012	02/2013

VI. History of MIT Appointments

Rank	*Start*	*End*
Sloan School Career Development Assistant Professor	07/2025	present
Assistant Professor	09/2024	present

VII. MIT Activities

Committee	*Start*	*End*
MIT Sloan Global Initiatives Committee	2025	present
MIT Sloan Operations Management Seminar co-organizer	2024	present
MIT Operations Research Center (ORC) Committees	2024	present
MIT ORC PhD Admissions Committee	2024	present

MBAn (Master of Business Analytics) research advisor

Sandra You	Spring 2025
Leo Hu (Independent Study)	Spring 2025

VIII. Governmental Committees and Service

IX. Consulting Activities

Name	*Start*	*End*
External Consultant, Uber Technologies	01/2019	12/2019

X. Other Activities

XI. Awards

Date

Sample Research Prizes

Runner up, INFORMS Revenue Management and Pricing (RMP) Impact Prize 2025
Museum Analytics: A Collaboration with the Van Gogh Museum

Winner, POMS (Production and Operations Management Society)
Applied Research Challenge 2024
Designing Layouts for Sequential Experiences: Application to Cultural Institutions

Food Subsidies and Substitution: Take-up, Substitution Effects and Nutrition
Finalist, POMS Applied Research Challenge 2024
Runner-up, 2023 INFORMS TIMES (Technology, Innovation Management and Entrepreneurship Section) Best Working Paper Award 2023
Finalist, INFORMS Public Sector OR (Operations Research) Best Paper Award 2023

Finalist, POMS College of Service Operations Management 2023
Designing Layouts for Sequential Experiences: Application to Cultural Institutions

2nd Prize, INFORMS Junior Faculty Interest Group, Best Paper Award 2022
Representing Random Utility Choice Models with Neural Networks

Junior Faculty Research Award (London Business School) 2021
Granted by the Research & Faculty office on the recommendation of Subject Area Chairs

Finalist, INFORMS MSOM (Manufacturing and Service Operations Management)
Best OM Paper Published in Operations Research Award 2021
Greedy-Like Algorithms for Dynamic Assortment Planning Under Multinomial Logit Preferences

Finalist, INFORMS George Nicholson Prize Competition 2016
Greedy-Like Algorithms for Dynamic Assortment Planning Under Multinomial Logit Preferences

Winner, MIT ORC Best Student Paper 2015
Assortment Optimization Under Consider-then-Choose Choice Models

Student Prizes

Google PhD Fellowship in Algorithms and Optimization 2025
Entrant: Alireza AmaniHamedani

Food Subsidies and Substitution: Take-up, Substitution Effects and Nutrition
Entrant: Alp Sungu
- Winner, George B. Dantzig Dissertation Award 2024
- 1st Prize, INFORMS RMP Student Paper Award 2023
- 1st Prize, INFORMS MSOM Student Paper Competitions 2023

Designing Layouts for Sequential Experiences: Application to Cultural Institutions
Entrant: Abhishek Deshmane
- 2nd Prize, INFORMS RMP Student Paper Competition 2022
- 1st Prize, INFORMS IBM Service Sciences Student Paper Competition 2022
- Finalist, INFORMS SOLA (Section on Location Analysis) Paper Competition 2022

Grants

MIT Abdul Latif Jameel Water & Food Systems Lab (J-WAFS) Seed Grant ($150,000) 2025-2027
Optimal Subsidy Design: Application to Food Assistance Programs

MIT GenAI Consortium Grant ($150,000, co-PI with Vivek Farias) 2025-2027
Random Utility Models Meet LLM Alignment

MIT GenAI Consortium Seed Grant ($50,000) 2025-2026
A Pilot Study on LLM-Based Extension Services in Smallholder Agriculture

MIT Sloan Junior Faculty Research Assistance Program ($27,000) 2025

Selected by the 2022 ERC Starting Grant panel and funded by UKRI(~£1.1M) 2023
Algorithms for Pathway Operations: Theory and Application to Museums (2023-2028)

Wheeler Institute (£8,000) 2023
Recommendation and information provision for sequential experiences in the cultural sector
with Abhishek Deshmane and Victor Martínez-de-Albéniz

Funding for *Food subsidies in Indian Groceries* with Kamalini Ramdas and Alp Sungu
LBS Institute of Innovation and Entrepreneurship (£25,000) 2021
OCP Group (£30,000) 2021
Wheeler Institute (£40,000) 2020

Sample Teaching Prizes

Best Teacher Award, MAM program (London Business School) 2021, 2024
Determined by student votes for the 2023/2024 academic year

Runner-up, Best Teacher Award, MAM program (London Business School) 2021, 2023
Determined by student votes for the 2022/2023 academic year

XII. Professional Membership and Activities

Visiting Scientist, Simons Institute for the Theory of Computing, UC Berkeley Fall 2022
Visiting Scholar, Stanford Graduate School of Business, Stanford University Fall 2021

Memberships
The Institute for Operations Research and the Management Sciences (INFORMS)
Association for Computing Machinery (ACM)

Editorial Boards	*Start*	*End*
Associate Editor, Operations Research *Stochastic Models area*	2024	present
Associate Editor, Management Science *Market design, Platforms, and Demand Analytics area*	2024	present

Conferences (PC: Program Committee, OC: Organizing Committee)

OC, Stochastic Networks, Applied Probability, and Performance	2025-2026
Co-organizer, Workshop on Information & Learning (LBS)	2025
PC, ACM Conference on Economics and Computation	2024
Co-organizer, Workshop on the Design of Online Platforms EC'21	2021

Award Committees

Judge, INFORMS Section on Public and Societal Operations Research (PSOR) Student Paper Competition	2025
Judge, INFORMS MSOM Best Student Paper Prize	2024
Committee member, INFORMS RMP Student Paper Competition	2020-2023
Committee member, INFORMS George Nicholson Student Paper Competition	2020-2021

Reviewer
Management Science (Meritorious Service Award in 2020, 2023), Operations Research, Mathematics of Operations Research, Manufacturing & Service Operations Management (M&SOM), ACM-SIAM SODA (Symposium on Discrete Algorithms) Conference, Operations Research Letters, INFORMS Journal on Optimization, Naval Research Letters, Journal of Machine Learning Research

XIII. Subjects Taught

Number	*Title*	*Date*
15.761	Introduction to Operations Management	Spring 2025
15.764	Theory of Operations Management, Part 1	Spring 2025

Non-MIT (LBS)

C0/D24	Data Analytics for Managers (EMBA London & Dubai)	2018-2024
AM13	Decision Analytics Modeling (MSc Analytics & Mngmt)	2020-2024

XIV. Thesis Supervision

1. Doctoral Theses Supervised

Non-MIT

Alp Sungu, “Essays on Technology-enabled Social Impact” *(LBS, co-advised with Kamalini Ramdas, first placement: Wharton School of Business)*

Ömer Saritaç, “Dynamic Matching and Decentralized Pricing for Two-sided Markets” *(LBS, first placement: Singapore Management University)*

2. Master’s Theses Supervised

3. Bachelor’s Theses Supervised

Non-MIT

Zhicong Hu, Pre-doctoral fellow in 2023-2024, Placement: PhD student at INSEAD

4. Theses in Progress

Name	*Program*	*Degree*	*Year*
Huiying Zhong	ORC	PhD	2029
Aymane El Gadarri	ORC	PhD	2029
Avery Powers	ORC	PhD	2030
Lindsay Carlin	ORC	MSc	2027

Non-MIT

Alireza AmaniHamedani	LBS	PhD	2026

XV. Publications *(including order of co-authors, if any)*

1. Theses

Assortment and Inventory Optimization: From Predictive Choice Models to Near-optimal Algorithms

2. Refereed Journal Articles

Authors in alphabetical order as per convention of the field; otherwise first author(s) are indicated by *

1. Aouad, A., Deshmane, A., & Martinez-de-Albeniz, V. (2025). Designing Layouts for Sequential Experiences: Application to Cultural Institutions. *Forthcoming in Management Science.*

2. Aouad, A., & Désir, A. (2025). Representing random utility choice models with neural networks. *Forthcoming in Management Science.*

3. Aouad, A., Feldman, J., Segev, D., & Zhang, D. (2025). The click-based MNL model: A framework for modeling click data in assortment optimization. *Forthcoming in Management Science.*

4. Aouad, A., Elmachtoub, A. N., Ferreira, K. J., & McNellis, R. (2023). Market Segmentation Trees. *Manufacturing & Service Operations Management, 25(*2), 648-667.

5. Aouad, A., and Segev, D. (2023). The stability of MNL-based demand under dynamic customer substitution and its algorithmic implications. *Operations Research, 71*(4),1216-1249.

6. Aouad, A., and Segev, D. (2023). Technical Note—An approximate dynamic programming approach to the incremental knapsack problem. *Operations Research*, *71*(4), 1414-1433.

7. Aouad, A., Feldman, J., & Segev, D. (2023). The exponomial choice model for assortment optimization: an alternative to the MNL model? *Management Science*, *69*(5), 2814-2832.

8. Aouad, A., & Saban, D. (2023). Online assortment optimization for two-sided matching platforms. *Management Science*, *69*(4), 2069-2087.

9. Aouad, A., &Saritaç, Ö. (2022). Dynamic stochastic matching under limited time. *Operations Research, 70(*4), 2349-2383.

10. Aouad, A., & Segev, D. (2020). Display optimization for vertically differentiated locations under multinomial logit preferences. *Management Science 67*(6), 3519-3550.

11. Aouad, A., Farias, V., & Levi, R. (2020). Assortment optimization under consider-then-choose choice models. *Management Science*, *67*(6), 3368-3386.

12. Aouad, A., & Segev, D. (2019). The ordered k-median problem: surrogate models and approximation algorithms. *Mathematical Programming*, *177*(1-2), 55-83.

13. Aouad, A., Levi, R., & Segev, D. (2019). Approximation algorithms for dynamic assortment optimization models. *Mathematics of Operations Research*, *44*(2), 487-511.

14. Aouad, A., Levi, R., & Segev, D. (2018). Greedy-like algorithms for dynamic assortment planning under multinomial logit preferences. *Operations Research*, *66*(5), 1321-1345.

15. Aouad, A., Farias, V., Levi, R., & Segev, D. (2018). The approximability of assortment optimization under ranking preferences. *Operations Research*, *66*(6), 1661-1669.

3. Articles in Refereed Conference Proceedings

AmaniHamedani, A., Aouad, A. & Saberi, A. (2025). Adaptive approximation schemes for matching queues. In *Proceedings of the 57th Annual ACM Symposium on Theory of Computing (pp. 1454-1464).*

Sungu, A. Aouad, A., Ramdas, K., & (2023), Food Subsidies at the Base-of-the-Pyramid: Take-up, Substitution and Nutrition. *The 3rd ACM conference on Equity and Access in Algorithms, Mechanisms, and Optimization (EAAMO'23).*

Aouad, A., Ramdas, K., & Sungu, A. (2023). Food Subsidies, Food Shopping and Substitution: Experimental Evidence from a Mumbai Settlement. *The North East Universities Development Consortium (NEUDC) Conference 2023.*

Aouad, A. & Ma, W. (2023). A Nonparametric Framework for Online Stochastic Matching with Correlated Arrivals. *EC '23: The 24th ACM Conference on Economics and Computation.*

Aouad, A., Saritaç, Ö. & Yan, C. (2023). Centralized versus Decentralized Pricing Controls in Dynamic Matching Platforms. *EC '23: The 24th ACM Conference on Economics and Computation.*

Aouad, A. & Saban, D. (2021). Online Assortment Optimization for Two-sided Matching Platforms. *EC '21: The 22nd ACM Conference on Economics and Computation.*

Aouad, A. & Saritac, O. (2020). Dynamic Stochastic Matching Under Limited Time. *EC '20: The 21th ACM Conference on Economics and Computation.*

4. Articles in Non-Refereed Conference Proceedings

5. Papers/Articles in Progress or Under Review

16. Aouad, A., Saritaç, Ö., & Yan, C. (2023). Centralized Versus Decentralized Pricing Controls for Dynamic Matching Platforms. Submitted to *Manufacturing & Service Operations Management* (Major Revision).

17. Aouad, A., Ji, J. & Shaposhnik, Y. (2024). The Pandora's box problem with sequential inspections. Submitted to *Operations Research* (Major Revision).

18. AmaniHamedani, A., Aouad, A., & Freund, D. (2023). Spatial Matching under Multihoming. Major Revision in *Operations Research.*

19. Aouad, A., & Ma, W. (2022). A nonparametric framework for online stochastic matching with correlated arrivals. Major Revision in *Management Science.*

20. Aouad, A., & den Boer, A. V. (2021). Algorithmic collusion in assortment games. Reject & Resubmit in Management Science, pre-print on *SSRN 3930364.*

21. Aouad, A., Ramdas, K., & Sungu, A. (2024) Food Subsidies and Substitution: A Field Experiment Using Digitized Micro-Grocery Transactions in Underserved Communities. Submitted to *Operations Research.*

22. AmaniHamedani, A., Aouad, A. & Saberi, A. (2025). Adaptive approximation schemes for matching queues. Submitted to *Operations Research.*

23. Aouad, A.*****, Ramdas, K.*****, Sungu, A.*****, Gupta, A., Kesebir, S., & Swaminathan, S. (2025) The Popeye Effect: Social Media Influencers Boost Healthy Shopping and Local Micro-Retailers. Submitted to *Manufacturing & Service Operations Management.*

24. AmaniHamedani, A., Aouad, A., Pollner, T. & Saberi, A. (2025). Improved approximations for stationary bipartite matching: Beyond probabilistic independence. In preparation for *Mathematics of Operations Research.*

25. Aouad, A., Deshmane, A., Martinez-de-Albeniz, V., & van Dam, R. (2025). Digital Nudges at the Van Gogh Museum Increase Engagement, Pace Visitors, and Reduce Congestion. Work in progress*.*

6. Other Publications

Aouad, A. & Moch, E., (2025). A Glimpse into EV battery quality control. Working case*.*

Auriau, V.*****, Aouad, A., Désir, A., & Malherbe, E. (2024). Choice-learn: large-scale choice modeling for operational contexts through the lens of machine learning. *Journal of Open Source Software*, *9*(101), 6899.

A., Ramdas, K, & Sungu, A. (2024), Grain subsidies and junk food purchases among low-income individuals, *Ideas for India (url)*

7. Technical Reports

XVI. Invited Oral Presentations

2025-2026 (invited and scheduled)

"Demand Management for Public Sector Operations: Application to Food Subsidies"
McCombs School of Business, UT Austin, Spring 2026.
NYU Tandon, Spring 2026 (invited).
UNC Kenan-Flager Business School, Fall 2025 (scheduled)

"Adaptive Approximation Schemes for Dynamic Matching"
Virtual Market Design Seminar, Fall 2025 (scheduled)

2024-2025

"Digital Nudges at the Van Gogh Museum Increase Engagement, Pace Visitors, and Reduce Congestion"
UCLA, Spring 2025 (rescheduled to 2025-2026)

"Adaptive Approximation Schemes for Dynamic Matching"
University of Rochester, Spring 2025 (rescheduled to 2025-2026)

"Demand Management for Public Sector Operations: Application to Food Subsidies"
MIT OR Seminar, Spring 2025

"Adaptive Policies and Approximation Schemes for Dynamic Matching"
HKUST (Hong Kong), Fall 2024
CUHK (Hong Kong), Fall 2024
CNRS workshop on "*Online Stochastic Matching*" (France), Fall 2024

"Representing Random Utility Choice Models with Neural Networks"
Imperial College, Computational Optimization Group, Fall 2024

2023-2024

"Spatial Matching under Multihoming"
London Operations Research Day (UK), Spring 2024

"Adaptive Policies and Approximation Schemes for Dynamic Matching"
BIRS workshop on Combinatorial Optimization for Online Platforms, Spring 2024

"Food Subsidies and Substitution: Experimental Evidence from Indian Micro Retail Panel Data," International Research and Innovation Seminar, Mohammed VI Polytechnic University (Morocco), Fall 2023
Africa Business School (Morocco), Fall 2023

"Advancements in the Control of Dynamic Matching Markets,"
CIRM (France), Workshop on "*From matchings to markets, A tale of Mathematics, Economics and Computer Science*,*"* Fall 2023

"Advancements in the Control of Dynamic Matching Markets"
UM6P Mathematics & Decision Conference, Fall 2023

"Analytics in Museums: Layout Optimization for Sequential Experiences"
Bilkent University (Turkey), Fall 2023

2022-2023

"Food Subsidies and Substitution: Experimental Evidence from Indian Micro Retail Panel Data," IESE Business School (Spain), Spring 2023

"A Nonparametric Framework for Online Stochastic Matching,"
Workshop in Innovation and Learning, INSEAD (France), Summer 2023
INFORMS Applied Probability Society Conference (Nancy), Summer 2023
MIT Sloan, Spring 2023
Distinguished Speaker Series, NEOMA (Paris), Spring 2023
SNAPP seminar (online), Spring 2023

"Dynamic Stochastic Matching Under Limited Time"
HKUST, ISOM seminar, Fall 2022

2021-2022

"Algorithmic Collusion in Assortment Games"
Workshop in Innovation and Learning, IESE Summer 2022

"Analytics in Museums: Layout Optimization for Sequential Experiences"
Imperial College Business School, Analytics & Operations seminar (UK), Spring 2022
Indian School of Business, Spring 2022

"Dynamic Stochastic Matching Under Limited Time"
Imperial College, Control and Optimisation seminar, Spring 2022

"Algorithmic Collusion in Assortment Games"
University of California, Berkeley IEOR (online), Fall 2021

"Dynamic Stochastic Matching Under Limited Time"
Duke University, Fuqua Business School, Decision Sciences (online), Fall 2021

2020-2021

"Dynamic Stochastic Matching Under Limited Time"
Uber Technologies (online), Summer 2021
USC Marshall (online), Spring 2021
MIT Sloan (online), Spring 2021
MIT, DSL seminar series (cancelled due to COVID), Spring 2021
Stanford GSB (online), Fall 2020
Olin Business School, Washington University (online), Fall 2020
European TOM seminar series (online), Fall 2020

Deliveroo, Data Science team (online), Fall 2020
McCombs School of Business (online), Fall 2020

2019-2020

"Click-Based MNL: Algorithmic Frameworks for Modeling Click Data in Assortment Optimization"
Stanford MS&E, RAIN seminar, Fall 2019

"A Data-Driven Lens on the Design and Operations of Online Platforms"
OCP Group, Casablanca, Fall 2019

2018-2019

"Matching Optimization"
Uber Technology, Marketplace Optimization and Data Science Seminar, Spring 2018

"Market Segmentation Trees" (updated title)
Square, Inc., Data Science Seminar, Summer 2019

2016-2017

"Revenue Management in Face of Choice Heterogeneity"
Cornell ORIE, Spring 2107
Columbia University, IEOR Department, Spring 2107
Chicago Booth School of Business, Spring 2107
Columbia Business School, The Decision, Risk and Operations Division, Spring 2107
Harvard Business School Technology and Operations Management Unit, Spring 2107
INSEAD Paris Technology and Operations Management, Spring 2107
Michigan Ross School of Business, Spring 2107
Yale School of Management, Spring 2107
Fuqua School of Business, Spring 2107
HEC Business School (France), Spring 2107
University of British Columbia Sauder Business School (Canada), Spring 2107
McGill Desautels Faculty of Management (Canada), Fall 2016

London Business School (UK), Fall 2016
MIT, Operations Management seminar, Fall 2016

"Assortment Optimization under Consider-then-Choose Choice models,"
Young Researchers Workshop "*Data-Driven Decision-Making"*, Cornell ORIE, Fall 2016

2015-2016

"Assortment Optimization under Consider-then-Choose Choice models,"
MIT, Operations Research seminar, Spring 2016