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| PERSONAL | Name: Vivek Francis Farias Department: Operations Management Date of Birth: October, 1981 Place of Birth: Bombay, India Citizenship: US | |
| EDUCATION | Stanford University , Stanford, CA Ph.D., Electrical Engineering. | <i>Sept 2002 - June 2007</i> |
| | University of Arizona , Tucson, AZ B.S., Computer Engineering. College of Engineering Outstanding Graduating Senior in Computer Engineering for 2002 | <i>Aug 1999 - May 2002</i> |
| PH.D. THESIS | <i>Revenue Management Beyond ‘Estimate, Then Optimize’</i> , Stanford University, 2007. Thesis Advisor: Benjamin Van Roy. | |
| RESEARCH INTERESTS | Revenue Management, Approximate Dynamic Programming and Reinforcement Learning, Approximation Algorithms for Stochastic Control, Healthcare Operations | |
| NON-MIT EMPLOYMENT | Nike, Inc. , Boston, MA <i>Commercial Analytics</i> Guiding the integration of the CelectEngine technology platform across Commercial Analytics at Nike, Inc. | <i>August 2019 - Present</i> |
| | Celect, Inc. , Boston, MA <i>Co-Founder, Chief Technology Officer</i> Co-founder, CTO of an ML/ retail tech company that commercialized my research on choice modeling. Raised over \$30M in capital from top-tier VCs and Federal sources including In-Q-Tel. Helped assemble a team of industry veterans and grow team to ~75 employees. Implemented technology platform at multiple top-tier US retailers. Successful exit to Nike. | <i>July 2014 - August 2019</i> |
| | The Carlyle Group , New York, NY <i>Ad-Hoc Consultant</i> | <i>Various</i> |
| | Grantham, Mayo, Van Otterloo LLC. , Boston, MA <i>High Frequency Trading Group</i> One of four designers of GMO’s (a USD 110 bn. money manager) first high frequency algorithmic trading strategy. Development of approximation algorithms for high-dimensional financial stochastic control problems and trading models. The strategy was used by GMO between December 2005 and July 2010 after which it was spun out as a separate investment vehicle. | <i>Various (June 2005 - June 2007)</i> |
| | Micron Technology , Boise, ID <i>Summer intern, Flash R&D</i> Designed/ automated multiple test processes for flash memory chip testing. Resulted in very significant test cycle time savings. Offered a permanent position while still a sophomore. | <i>May 2001 - Aug 2001</i> |
| MIT APPOINTMENTS | MIT Sloan School of Management , Cambridge, MA <i>Patrick J. McGovern (1959) Professor</i> <i>Robert N. Noyce Career Development Associate Professor (with Tenure)</i> <i>Robert N. Noyce Career Development Associate Professor (without Tenure)</i> | <i>July 2018 - present</i> <i>July 2013 - June 2018</i> <i>July 2011 - June 2013</i> |

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| <i>Robert N. Noyce Career Development Assistant Professor</i> | <i>July 2009 - June 2011</i> |
| <i>J. Spencer Standish (1945) Assistant Professor</i> | <i>July 2008 - June 2009</i> |
| <i>Assistant Professor of Operations Management</i> | <i>July 2007 - June 2008</i> |

MIT ACTIVITIES

- Group Head of the Operations Management Group at MIT Sloan (2017 - present)
- Member of the Masters in Business Analytics Program Committee (2016 - present)
- Program leader for the Munjal Manufacturing Institute, an institute established at the Indian School of Business with the aid of the Sloan School of Management (2015 - present)
- Operation Management Group Faculty Search Committee Member (2015 - present)
- Member of Solaris task-force, exploring ways for technology to influence Sloan's educational mission. (2014 - 2015)
- Member of Sloan CIO search committee. (2014)
- Organizer of first MIT 'Building Networked Collaborations' conference (2012) that seeks to connect researchers at MIT's international partner schools with their colleagues at MIT.
- MIT co-lead on collaboration with Beth Israel Deaconess Hospital. (2009-2012)
- Undergraduate Admissions Committee, 2008, 2009.
- MSOM Conference Program Committee, 2009.
- OR Center Admissions Committee, 2009, 2011, 2012, 2015, 2016; MIT Sloan OM Admission Committee, 2008-12.
- Invited by MBA student body to deliver one of three mock lectures to incoming class (2010, 2011).

AWARDS
(SELECTED)

- INFORMS MSOM Young Scholar Prize. (November 2020)
- MIT Jamieson Prize for Excellence in Teaching. (May 2020, USD 10k)
- INFORMS Wagner Prize Finalist for *Primal-Dual Algorithms For Order Fulfillment At Urban Outfitters, Inc.* (November 2018)
- INFORMS George Nicholson award to advisee A. A. Li for 'Learning Preferences with Side Information'. (October 2017)
- INFORMS MSOM Best Publication in Management Science for *A Nonparametric Approach to Modeling Choice with Limited Data* (November 2016)
- ISMS-MSI Gary Lilien Practice Prize Finalist for *Building Optimized and Hyperlocal Product Assortments: A Nonparametric Choice Approach used by Celest* (May 2016)
- INFORMS Revenue Management and Pricing Section Prize for the best contribution to the science of pricing and revenue management published in the last five years for *A Nonparametric Approach to Modeling Choice with Limited Data* (November 2015)
- INFORMS Simulation Society Best Publication Award for a paper published in the last three years, award for *Pathwise Optimization for Optimal Stopping* (December 2014)
- INFORMS MSOM Student Paper Contest honorable mention to advisee D. F. Ciocan for 'Model Predictive Control for Dynamic Allocation Problems'. (October 2013)
- MIT Sloan Outstanding Teacher Award. (May 2013)
- INFORMS JFIG Paper Prize (first place) for *A Smoothed Approximate Linear Program*. (November 2011)
- INFORMS Pierskalla Award (Finalist) for *Fairness, Efficiency and Flexibility in the Organ Allocation for Kidney Transplantation*. (November 2011)
- NSF CAREER Award for the proposal *Large Scale Stochastic Control: A Math Programming and Discrete Optimization Lens*. (February 2011; One of two awarded nationally in the area of Operations

Research in 2010, USD 400k)

INFORMS MSOM Student Paper Contest first prize to advisee S. Jagabathula for ‘A Nonparametric Approach to Modeling Choice with Limited Data’. (November 2010)

INFORMS JFIG Paper Prize (second place) for *The Linear Programming Approach to Solving Large Scale Dynamic Stochastic Games*. (November 2009)

INFORMS MSOM Student Paper Contest second prize for *Dynamic Pricing with a Prior on Market Response*. (November 2006)

Stanford School of Engineering Fellow (Autumn 2002)

IEEE Region 6 Student Paper Contest Prize (third place) for Senior Thesis (Autumn 2002)

Arizona Regents Fellow (Arizona Class of 2003)

RESEARCH GRANTS MIT-Sensetime Grant: *Dynamic Portfolio Management*. (2018, USD 200k).

NSF Grant: *An Optimization Framework for Dynamic A-B Testing*. (2017, USD 471k).

NSF Grant: *Revenue Mgmt. For Enterprise Users of Cloud Infrastructure*. (2016, USD 360k).

NSF Grant: *An Innovative Optimization and Computational Framework for Assortment Problems Under Consider-Then-Rank Choice Models*. (2015, USD 300k, with R. Levi).

Accenture-MIT grant: *A New Framework for Dynamic Collateral Management*. (2015, USD 125k, with H. Chen).

Accenture-MIT grant: *Choice Modeling and Big Data*. (2013, USD 150k).

NSF CAREER Grant: *Large Scale Stochastic Control: A Math Programming and Discrete Optimization Lens*. (2011, USD 400k).

NSF Grant: *What Do Customers Like: A New Approach That Lets The Data Decide*. (2010, USD 305k).

Ford Grant: *Compressive Sensing and Consumer Choice*. (2010, USD 300k)

Solomon Buschbaum Research Award for interdisciplinary research. (2008, USD 50k)

MEDIA
RECOGNITION
(SELECTED)

‘Boston startup raises \$10M for retail software that predicts inventory needs’, Boston Business Journal, March 1, 2017. (Research on Choice Modeling)

‘The hat whisperers: This Boston startup tracks shopper’s habits to help brick-and-mortar stores make sales’, Boston Globe, June 25, 2015. (Research on Choice Modeling)

‘What Air Traffic Can Teach Us About Kidney Transplants’, NPR’s Planet Money, May 30, 2012. (Research on Organ Allocation)

‘Is It Time To Retire The Five Star Rating System?’, New York Times, July 13, 2011. (Research on Choice Modeling)

SELECTED SERVICE INFORMS Revenue Management and Pricing Section Prize Committee Member (2016-17).

NSF Panel member to evaluate proposals submitted to the Service Enterprise Systems program (2010, 2011, 2012, 2013, 2014).

One of 6 voting members of Scientific Registry of Transplant Recipients Technical Advisory Committee (the US body responsible for simulation studies related to organ allocation policy). (2011-2014).

INFORMS Dantzig Dissertation Prize Committee Member (2012-14).

Secretary, INFORMS Revenue Management and Pricing Section (2012-14).

Council member, INFORMS Applied Probability Society (2011-13).

Reviewer for Operations Research, Manufacturing & Service Ops. Management, Math of Operations

Research, Management Sci., IEEE Trans. Information Theory, IEEE Trans. Automatic Control.
Guest Associate Editor for OR Letters.

Associate Editor for Management Science (Business Analytics) (2012-2013).

Associate Editor for INFORMS Journal on Optimization (2017-).

Associate Editor for Management Science (Big Data Analytics, Entrepreneurship and Innovation)
(2018-).

Associate Editor for Operations Research (Decision Analysis, Revenue Management and Market
Analytics) (2018-).

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| SUBJECTS TAUGHT | 15.761 Intro. to Operations Management (Evaluation Score: 4.79, 4.85/5) | <i>Spring 2008</i> |
| | 15.764 Theory of Operations Management (Evaluation Score: 4.50/5) (Developed course. Featured several computer based games highlighting advanced concepts.) | <i>Spring 2009</i> |
| | 15.761 Intro. to Operations Management (Evaluation Score: 4.75/5) (Extended course from half to full semester w/ Retsef Levi. Grew enrollment by 50%) | <i>Spring 2009</i> |
| | 15.761 Intro. to Operations Management (Evaluation Score: 4.50, 4.51, 4.23/5) | <i>Spring 2010</i> |
| | 15.066 Systems Optimization and Applications (Evaluation Score: 4.71/5) | <i>Summer 2010</i> |
| | 15.066 Systems Optimization and Applications (Evaluation Score: 4.06/5) | <i>Summer 2011</i> |
| | 15.778 Fellows: Intro. to Operations Management (no individual eval) | <i>Summer 2011</i> |
| | 15.764 Theory of Operations Management (Evaluation Score: 4.60/5) | <i>Fall 2011</i> |
| | 15.778 Fellows: Intro. to Operations Management (Evaluation Score: 3.90, 4.08/5) | <i>Summer 2012</i> |
| | 15.778 Data, Models and Decisions (Evaluation Score: 4.82, 4.88/5) | <i>Fall 2012</i> |
| | 15.734 EMBA: Intro. To Operations Management (Evaluation Score: 4.64/5) | <i>Spring 2013</i> |
| | 15.767 Intro. to Healthcare Delivery in the U.S (Evaluation Score: 4.5/5) | <i>Fall 2013</i> |
| | 15.734 EMBA: Intro. to Operations Management (Evaluation Score: 4.7/5) | <i>Fall 2013</i> |
| | 15.734 EMBA: Intro. to Operations Management (Evaluation Score: 4.36, 4.24/5) | <i>Summer 2016</i> |
| | 15.778 Fellows: Intro. to Operations Management (Evaluation Score: 4.75, 4.77/5) | <i>Summer 2016</i> |
| | 15.778 Fellows: Intro. to Operations Management (Evaluation Score: 4.76, 4.73/5) | <i>Summer 2017</i> |
| | 15.778 Fellows: Intro. to Operations Management (Evaluation Score: 4.76, 4.73/5) | <i>Summer 2018</i> |
| | 15.785 Digital Product Management (Evaluation Score: 4.6/5) | <i>Spring 2019</i> |
| | 15.778 Fellows: Intro. to Operations Management (Evaluation Score: 4.88,4.69/5) | <i>Summer 2019</i> |
| | 15.785 Digital Product Management (Evaluation Score: 4.6/5) | <i>Spring 2020</i> |
| | 15.778 Fellows: Intro. to Operations Management (Evaluation Score: 4.82,4.61/5) | <i>Summer 2020</i> |

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| PH.D. THESES SUPERVISED | Eli Gutin (OR Center); August 2018; Data Scientist at Uber. <i>Topic: Practical Applications of Large-Scale Stochastic Control for Learning and Optimization</i> |
| | Andrew Li (OR Center); August 2018; Assistant Professor at Carnegie Mellon University. <i>Topic: Algorithms for Large-Scale Personalization</i> |
| | Ali Aouad (OR Center); August 2017; Assistant Professor at London Business School. (co-advised w/ R. Levi) <i>Topic: Choice Modeling and Machine Learning</i> |
| | Florin Ciocan (MIT Sloan); August 2014; Assistant Professor at INSEAD. <i>Topic: High-Dimensional Revenue Management</i> |
| | Matthieu Monsch (OR Center); August 2013; Senior Data Scientist at LinkedIn. (co-advised w/ G. |

Perakis) *Topic: Revenue Management and Applied Machine Learning*

Yiwei Chen (MIT Sloan); August 2012; Assistant Professor at Singapore University of Technology and Design. *Topic: Revenue Management*

Nikolaos Trichakis (OR Center); June 2011; Assistant Professor at MIT Sloan. (co-advised w/ D. Bertsimas) *Topic: Fairness and Deceased Donor Organ Allocation*.
Awarded the INFORMS Dantzig Dissertation Award Third Prize.

Srikanth Jagabathula (MIT EECS); August 2011; Assistant Professor at New York University Stern School of Business. (co-advised w/ D. Shah) *Topic: Modeling Choice*

Carri Chan (Stanford EE); June 2009; Assistant Professor at Columbia University Graduate School of Business. (primarily advised by N. Bambos) *Topic: Stochastic Control*

S.M. THESES
SUPERVISED

Bryan Park (EECS); December 2010; Trader, UBS. *Topic: Revenue Management ADP*

Gregory Sham (Sloan MBA); May 2012; Associate, McKinsey. *Topic: Surgical OR Scheduling*

Ryan Graue (Sloan MBA); May 2013. *Topic: Surgical OR Scheduling*

Marcus Braun (Sloan MBA); May 2014; Associate, McKinsey. *Topic: Surgical OR Scheduling*

Giselle Valera (Sloan Fellow); May 2017; Global Business VP, USPS. *Topic: Postal Service Pricing*

Durgesh Das (Sloan MBA); May 2020; Associate, Bain. *Topic: Inventory Optimization*

Colin McIntyre (Sloan MBA); May 2020; Associate, Bain. *Topic: Routing Optimization*

PH.D. THESIS
SUPERVISION

Patricio Araneda (OR Center) 09/2017 - present

Deeksha Sinha (OR Center) 09/2015 - present

Eli Gutin (OR Center) 09/2014 - present

Andrew Li (OR Center) 09/2012 - present

Jehangir Mohamed (OR) 09/2013 - present (co-advised w/ Devavrat Shah)

THESES

Revenue Management Beyond 'Estimate, Then Optimize'. Stanford University Ph. D. Thesis, 2007.

A 2-D Simulation of Anisotropic Particle Shape. University of Arizona Honors Thesis, 2002.

PUBLISHED/
FORTHCOMING
ARTICLES

Except where otherwise noted, authors are in alphabetical order

¹ J. E. Blume, W. C. Manning, G. Troiano, M. Figa, L. Hesterberg, T. L. Platt, X. Zhaoa, R. A. Cuaresma, P. A. Everley, , M. Ko, H. Liou, M. Mahoney, S. Ferdosi, C. Stolarczyk, B. Tangeysh, H. Xia, D. Hornburg, A. Siddiqui, P. Ma, R. Langer, V. F. Farias, O. C. Farokhzad. *Rapid, Deep and Precise Profiling of the Plasma Proteome with Multi- Nanoparticle Protein Corona*. Nature Communications, Vol. 11, No. 1, 2020.

A. Aouad, V. F. Farias, R. Levi. *Assortment Optimization under Consider-then-Rank Choice Models.*, 2019. Management Science (forthcoming), 2020.

V. F. Farias, S. Jagabathula, D. Shah. *Inferring Sparse Preference Lists From Partial Information*. Stochastic Systems (forthcoming), 2020.

J. M. Andrews, V. F. Farias, A. I. Khojandi, C. M. Yan. *Primal-Dual Algorithms For Order Fulfillment At Urban Outfitters, Inc.*. Interfaces (forthcoming), 2019.

Y. Chen, V. F. Farias, N. Trichakis. *On the Efficacy of Static Prices for Revenue Management in the Face of Strategic Customers*. Management Science (forthcoming), 2018.

¹co-corresponding author

- N. Bhat, V. F. Farias, C. C. Moallemi, D. Sinha. *Near-Optimal A-B Testing*. Management Science (forthcoming), 2018.
- A. Aouad, V. F. Farias, R. Levi, D. Segev. *The Approximability of Assortment Optimization Under Ranking Preferences..* Operation Research, Vol. 66, No. 6, 2018.
- V. F. Farias, A. A. Li. *Learning Preferences with Side Information*. Management Science (forthcoming), 2017.
- Y. Chen, V. F. Farias. *Robust Dynamic Pricing with Strategic Customers*. Mathematics of Operations Research, Vol. 43, No. 4, 2018.
- ² C. W. Chan, V. F. Farias, G. Escobar. *The Impact of Delays on Service Times in the Intensive Care Unit*. Management Science (forthcoming), 2016.
- P. Cho, V. F. Farias, J. Kessler, R. Levi, T. Magnanti, E. Zarybnisky. *Maintenance and flight scheduling of low observable aircraft*. Naval Research Logistics (NRL), Vol. 62, No. 3, pp. 60-80, 2014.
- Y. Chen, V. F. Farias. *Simple Policies for Dynamic Pricing with Imperfect Forecasts*. Operations Research, Vol. 61, No. 3, pp. 612-624, 2013.
- V. F. Farias, S. Jagabathula, D. Shah. *A Nonparametric Approach to Modeling Choice with Limited Data*. Management Science. Vol. 59, No. 2, 305-322, 2013.
- D. Bertsimas, V. F. Farias, N. Trichakis. *Fairness, Efficiency and Flexibility in the Organ Allocation for Kidney Transplantation*. Operations Research, Vol. 61, No. 1, pp. 73-87, 2013.
- V. Desai, V. F. Farias, C. C. Moallemi. *Pathwise Optimization for Optimal Stopping*. Management Science, Vol. 58, No. 12, pp. 2292-2308, 2012.
- D. Bertsimas, V. F. Farias, N. Trichakis. *A Characterization of the Efficiency-Fairness Tradeoff*. Management Science. Vol. 58, No. 12, pp. 2234-2250, 2012.
- ³ C. W. Chan, V. F. Farias, N. Bambos, G. Escobar. *Maximizing Throughput of Hospital Intensive Care Units with Patient Readmissions*. Operations Research. Vol. 60, No. 6, pp. 1323-1341, 2012.
- D. F. Ciocan, V. F. Farias. *Model Predictive Control for Dynamic Resource Allocation*. Mathematics of Operations Research, Vol. 37, No. 3, August 2012, pp. 501-525.
- V. Desai, V. F. Farias, C. C. Moallemi. *The Smoothed Approximate Linear Program*. Operations Research, Vol. 60, No. 3, May-June 2012, pp. 655-674.
- V. F. Farias, R. Madan. *Irrevocable Multi-Armed Bandit Policies*. Operations Research, Vol. 59, No. 2, March-April 2011, pp. 383-399.
- D. Bertsimas, V. F. Farias, N. Trichakis. *The Price of Fairness*. Operations Research, Vol. 59, No. 1, January-February 2011, pp. 17-31.
- V. F. Farias, D. Saure, G. Weintraub. *The Linear Programming Approach to Solving Large Scale Dynamic Oligopoly Models*. RAND Journal of Economics, Vol. 53, No. 2, Summer 2012, pp. 253-282.
- C. W. Chan, V. F. Farias. *Stochastic Depletion Problems: Effective Myopic Policies for a class of Dynamic Optimization Problems*. Mathematics of Operations Research, Vol. 34, No. 2, May 2009,

²co-first author

³co-first author

pp. 333-350.

V. F. Farias, C. C. Moallemi, T. Weissman, B. Van Roy. *Universal Reinforcement Learning*. IEEE Transactions on Information Theory, Vol. 56, No. 5, May 2010, pp. 2441-2454.

V. F. Farias, B. Van Roy. *Dynamic Pricing with a Prior on Market Response*. Operations Research, Vol. 58, No. 1, January-February 2010, pp. 16-29.

V. F. Farias, B. Van Roy. *Approximation Algorithms for Dynamic Resource Allocation*. Operations Research Letters, Vol. 34, No. 2, March 2006, pp. 180-190.

⁴ M. C. Weinberg, D. P. Birnie III, and V. F. Farias. *Simulation of Anisotropic Particle Shape Development during 2D Transformation*. J. Phys. Chem. (B). Vol. 106, October 2002, pp. 8318-8325.

COMPLETED
ARTICLES

V. F. Farias, A. A. Li, D. Sinha *Optimizing Offer Sets in Sub-Linear Time*, 2020. (extended abstract in EC 2020)

V. F. Farias, E. Gutin *Optimistic Gittins Indices*, 2019. (extended abstract in NIPS 2016, Minor Revision in Operations Research)

N. Bhat, V. F. Farias, C. C. Moallemi. *Non-parametric Approximate Dynamic Programming via the Kernel Method*, 2018. (extended abstract in NIPS 2012. Minor Revision in Stochastic Systems)

WORKING PAPERS

H. Chen, V. F. Farias, E. Gutin *Near-Optimal Dynamic Collateral Optimization*, 2017.

J. Amjad, V. F. Farias, A. Li, D. Shah. *Optimal Resource Consumption with an Application to Cloud Infrastructure via Data-Driven Prophet Inequalities*, 2017.

Braun M., Bravo F., Farias V., R. Levi. *Optimization-driven framework to understand healthcare networks cost and resource allocation.*, 2016.

Y. C. Chen, V. F. Farias. *Merger Simulation in the presence of Network Revenue Management*, 2016.

SELECT REFER'D.
CONFERENCE
PAPERS

V. F. Farias, A. A. Li, D. Sinha *Optimizing Offer Sets in Sub-Linear Time*, Proceedings of the Twenty First ACM Conference on Economics and Computation (EC), ACM, 2020.

V. F. Farias, A. A. Li. *Optimal Recovery of Tensor Slices*. Proceedings of the 20th International Conference on Artificial Intelligence and Statistics (AISTAT), PMLR, 2017.

Y. Chen, V. F. Farias. *On the Efficacy of Static Prices for Revenue Management in the Face of Strategic Customers*. Proceedings of the Seventeenth ACM Conference on Economics and Computation (EC), ACM, 2016.

Gutin, Eli, and Vivek Farias. *Optimistic Gittins Indices*. Advances in Neural Information Processing Systems 29 (NIPS), pp. 3153-3161, MIT Press 2016.

Y. Chen, V. F. Farias. *Robust Dynamic Pricing with Strategic Customers*. Proceedings of the Sixteenth ACM Conference on Economics and Computation (EC), ACM, 2015.

N. Bhat, V. F. Farias, C. C. Moallemi. *Non-parametric Approximate Dynamic Programming via the Kernel Method*. Advances in Neural Information Processing Systems 25 (NIPS), MIT Press 2012.

V. F. Farias, S. Jagabathula, D. Shah. *A Data-Driven Approach to Modeling Choice*. Advances in Neural Information Processing Systems 22 (NIPS), MIT Press, 2009. (Spotlight paper)

⁴third author

V. Desai, V. F. Farias, C. C. Moallemi. *The Smoothed Approximate Linear Program*. Advances in Neural Information Processing Systems 22 (NIPS), MIT Press 2009. (Spotlight paper)

V. F. Farias, C. C. Moallemi, T. Weissman, B. Van Roy. *A Universal Scheme for Learning*. Proc. of the IEEE International Symposium on Information Theory (ISIT), September 2005.

V. F. Farias, C. C. Moallemi, B. Prabhakar. *Load Balancing with Migration Penalties*. Proc. of IEEE International Symposium on Information Theory (ISIT), September 2005; Stochastic Networks Research Conference, 2004. Invited to special issue of *Queuing Systems*.

BOOK CHAPTERS J. Acimovic, V. F. Farias, V. F. *The Fulfillment-Optimization Problem*. Operations Research & Management Science in the Age of Analytics (pp. 218-237). INFORMS, 2019.

V. V. Desai, V. F. Farias, C. C. Moallemi. *Bounds for Markov decision processes*. Reinforcement Learning and Approximate Dynamic Programming for Feedback Control, IEEE Press, 2011.

V. F. Farias, B. Van Roy. *Tetris: A Study of Randomized Constraint Sampling*. Probabilistic and Randomized Methods for Design Under Uncertainty, Springer, 2006.

INVITED ORAL PRESENTATIONS (2007 ONWARD)

Revenue Management Beyond ‘Estimate, Then Optimize’
University of Chicago GSB, Operations Management Seminar *January 2007*
IBM Almaden Research Center, Theory Group Seminar *May 2007*
Google (Mountain View Campus), Tech Talk Series *June 2007*

Stochastic Depletion Problems
MIT Operations Research Center, ORC Seminar *November 2007*
Stanford Management Science and Engineering, OR Seminar *November 2007*
Grantham, Mayo, Van Otterloo LLC. *December 2007*
Cornell University, ORIE Colloquium *November 2008*
Columbia University, Graduate School of Business, IEOR-DRO Seminar *November 2008*

Discharge Policies at General Intensive Care Units: A Quantitative Perspective
University of Pittsburgh *April 2010*
MSOM Special Interest Group on Healthcare *June 2010*

A New Approach to Modeling Choice
MIT Sloan, Marketing Group Seminar *November 2009*
University of British Columbia, Sauder School *December 2009*
Indian School of Business *March 2010*
Northwestern University, Kellogg School of Management *May 2010*
IBM T. J. Watson Research Center *July 2010*
Ford Motor Company *July 2010*
Carnegie Mellon University, Tepper School of Management *September 2010*
University of Minnesota, Department of Systems and Industrial Engineering *October 2010*
Stanford University, Graduate School of Business *November 2010*
Columbia University, Graduate School of Business, IEOR-DRO Seminar *November 2010*
Tsinghua University, ‘Mostly OM’ Workshop *May 2011*

Practical Dynamic Allocation
Laboratory for Information and Decision Systems, MIT EECS *November 2010*
New York University, Stern School of Business *April 2011*
University of Pennsylvania, Wharton School, Operations & Information Seminar *October 2011*
Duke University, Fuqua School of Business, Decision Sciences Seminar *October 2011*

Non-Parametric Approximate Dynamic Programming

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| University of Maryland, Robert H. Smith School of Business | <i>September 2012</i> |
| University of Southern California, Marshall School of Business | <i>November 2012</i> |
| University of Chicago GSB, Operations Management Seminar | <i>April 2013</i> |

Online A-B Testing

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| University of Texas, McCombs School of Business | <i>September 2014</i> |
| Stanford University, Management Science and Engineering | <i>October 2014</i> |
| INSEAD, Technology and Operations Management | <i>April 2015</i> |
| Yale School of Management | <i>April 2016</i> |
| UC Berkeley Simons Institute | <i>September 2016</i> |

Learning with Side Information

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| GeorgiaTech, Industrial and Systems Engineering | <i>April 2016</i> |
| Tsinghua University, 'Mostly OM' Workshop | <i>May 2016</i> |
| CWI Amsterdam, Machine Learning Seminar | <i>March 2017</i> |
| Columbia University, Graduate School of Business, IEOR-DRO Seminar | <i>October 2017</i> |
| UC Berkeley Simons Institute | <i>March 2018</i> |
| UIUC Allerton Conference on Communication, Control, and Computing | <i>October 2018</i> |
| New York University, Stern School of Business | <i>October 2018</i> |

Online Fulfillment Optimization

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| University of Minnesota, Institute for Mathematics and its Applications Workshop | <i>October 2018</i> |
| INFORMS Annual Conference Wagner Prize Presentations | <i>November 2018</i> |
| Northwestern University, Kellogg School of Management | <i>April 2019</i> |
| London Business School | <i>May 2019</i> |
| Stanford University, Graduate School of Business | <i>November 2019</i> |

Plenaries/ Tutorials

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| Tata Institute of Fundamental Research Applied Probability Summer School | <i>September 2009</i> |
| INFORMS Annual Meeting 2013 TutORials | <i>October 2013</i> |
| MSOM Special Interest Group Conference 2015 Thought Leader Plenary | <i>June 2015</i> |
| 12th International Conference on Computational Management Science Plenary | <i>June 2015</i> |
| INFORMS Workshop on Marketplace Innovation Plenary, Stanford University | <i>June 2017</i> |
| INFORMS Annual Meeting 2019 TutORials | <i>October 2019</i> |

COMPUTER SKILLS Architected and grown high availability, distributed real-time systems. Contributed to production codebases written in Java and Python, and using diverse technologies (eg. Spark).

PERSONAL INTERESTS Cooking, Technology