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Education

- 2005 – 2010 📖 **Ph.D., Rutgers University** Supply Chain Management.
Thesis title: *Stochastic analysis of bidding in sequential auctions and related problems.*
- 2000 – 2005 📖 **B.Tech & M. Tech, IIT-Bombay** Mechanical Engineering (Integrated Manufacturing).
Thesis title: *Analysis and applications of stochastic models for manufacturing systems.*

Employment History

- 2018 – Present 📖 **Assistant Professor**, Rutgers School of Business- Camden, NJ.
- 2012 – 2018 📖 **Assistant & Associate Professor**, La Salle University, Philadelphia, PA. (Tenured)
- 2010 – 2012 📖 **Assistant Professor**, Ithaca College, Ithaca, NY

Publications

Refereed Journal Articles

- 1 Mascarenhas, B., & **Puranam, K. S.** (2023a). Analysis of the medical residency algorithm to validate and improve equity. *PLoS One*, 18(4), e0284153.
- 2 Lucas, M. T., Novak, D. C., & **Puranam, K. S.** (2022). Heuristics and sensitivity analyses to guide replenishment decisions for red blood cells with random transfer. *Decision Support Systems*, 154, 113685.
- 3 Katehakis, M. N., & **Puranam, K. S.** (2021). On the evaluation of bidding strategies in sequential auctions. *Operations Research Letters*, 49(6), 829–836.
- 4 Mascarenhas, B., **Puranam, K. S.**, & Katehakis, M. N. (2021). Comparison of program-centric vs student-centric national resident matching algorithms. *Journal of the American Medical Association Network Open*, 4(6), e2113769–e2113769.
- 5 Lucas, M. T., Novak, D. C., **Puranam, K. S.**, & Fung, M. (2018). On the challenges of blood inventory management. *Archive of Blood Transfusion and Disorders*.
- 6 Dalman, M. D., & **Puranam, K. S.** (2017). Consumer evaluation of ingredient branding strategy. *Management Research Review*.
- 7 **Puranam, K. S.**, Novak, D. C., Lucas, M. T., & Fung, M. (2017). Managing blood inventory with multiple independent sources of supply. *European Journal of Operational Research*, 259(2), 500–511.
- 8 **Puranam, K. S.**, Novak, D. C., & Lucas, M. (2015). Extending the newsvendor model to account for uncontrolled inventory transfers. *Annals of Operations Research*, 1–14.
- 9 **Puranam, K. S.**, & Katehakis, M. (2014). On optimising taboo criteria in markov decision processes. *International Journal of Applied Decision Sciences*, 7(1), 33–43.
- 10 **Puranam, K. S.**, & Katehakis, M. N. (2014). On optimal bidding and inventory control in sequential procurement auctions: The multi period case. *Annals of Operations Research*, 217(1), 447–462.
- 11 Katehakis, M. N., & **Puranam, K. S.** (2012a). On bidding for a fixed number of items in a sequence of auctions. *European Journal of Operational Research*, 222(1), 76–84.

- 12 Katehakis, M. N., & **Puranam, K. S.** (2012b). On optimal bidding in sequential procurement auctions. *Operations Research Letters*, 40(4), 244–249.

Refereed Conference Publications

- 1 Katehakis, M. N., & **Puranam, K. S.** (2015). *On optimal bidding in concurrent auctions*, *Mathematical methods and systems in science and engineering*.
- 2 Katehakis, M. N., & **Puranam, K. S.** (2006). *A note on the optimal replacement problem*, *The transactions of wseas conference on applied mathematics*.

Books Edited

- 1 Tavana, M., Szabat, K., & **Puranam, K. S.** (2016). *Organizational productivity and performance measurements using predictive modeling and analytics*. IGI Global.
- 2 Tavana, M., & **Puranam, K. S.** (2014). *Handbook of research on organizational transformations through big data analytics*. IGI Global.

Articles under Review

- 1 Mascarenhas, B., & **Puranam, K. S.** (2023b). Improving equity in the residency match algorithm: Program and student factors related to matches. *British Medical Journal Open* (Under review).
- 2 **Puranam, K. S.**, & Iacocca, K. (2023). Managing inventory in customizable multi-echelon assembly systems. *International Journal of Production Research* (Second Revise and Resubmit).

Articles under Preparation

- 1 **Puranam, K. S.** (2023). *Comparing centralized and decentralized labor matching markets*.
- 2 **Puranam, K. S.**, Katehakis, M. N., & Mascarenhas, B. (2023). *Congestion in online labour markets*.

Conference Presentations

- 1 Comparing centralized and decentralized labor matching markets. (2022), INFORMS.
- 2 On the evaluation of bidding strategies in sequential auctions. (2020), EURO.
- 3 Bayesian learning in sequential auctions. (2019), POMS.
- 4 Perceptions of algorithmic bias – the case of medical student matching market. (2019), INFORMS.
- 5 Bidding and learning in sequential auctions. (2018), INFORMS.
- 6 A replenishment heuristic for blood with redistribution. (2018), INFORMS.
- 7 Learning in sequential auctions. (2017), INFORMS.
- 8 Learning in sequential auctions. (2016), INFORMS.
- 9 Bidding for multiple items in sequential auctions, (2015), INFORMS.
- 10 Consumer evaluation of ingredient branding strategy, (2015), 44th EMAC Annual Conference, Leuven, Belgium, 2015.
- 11 Adaptive bidding in repeated auctions. (2014), DSI.
- 12 Optimal ordering policies for a fixed-life perishable product with transfers. (2014), INFORMS.

- 13 Blood bank inventory management. (2013), DSI.
- 14 Joint bidding and pricing models. (2013), INFORMS.
- 15 Learning in multiple auctions. (2012), INFORMS.
- 16 **Puranam, K. S.**, Tavana, M., & Crossen, D. (2012). Organizational transformations through big data analytics (panel moderator), NEDSI.
- 17 Optimizing taboo criteria in markov decision processes. (2011), INFORMS.
- 18 Bidding for a fixed number of items in a sequence of auctions. (2010), INFORMS.
- 19 A note on the optimal replacement problem. (2010), DSI.
- 20 Optimal bidding in a sequence of auctions. (2009), INFORMS.
- 21 Taboo criteria in markov decision processes. (2009), INFORMS Applied probability conference.

Courses Taught

Rutgers- Camden	<ul style="list-style-type: none"> MBA and MS courses: Introduction to Business analytics, Supply chain analytics Undergrad courses: Supply chain analytics, Optimization and spreadsheet modeling.
La Salle University	<ul style="list-style-type: none"> MBA courses: Introduction to Business analytics, Supply chain analytics, Data mining, Operations management, Project management, Business statistics Undergrad courses: Sports analytics, Business statistics, Big Data analytics, Predictive and prescriptive analytics, Supply chain analytics, Data mining
Ithaca College	<ul style="list-style-type: none"> MBA courses: Decision Analysis and Operations Management Undergrad course: Operations Management
Rutgers- Newark	<ul style="list-style-type: none"> Undergrad courses: Production and Operations Management, Business Research Methods, Management Information Systems

TV Interviews

Nov 2021	<ul style="list-style-type: none"> <i>NJ Spotlight News</i>: Discussing scarcity of grocery items during the pandemic <i>6ABC</i>: Grocery store item shortage during the pandemic
Oct 2021	<ul style="list-style-type: none"> <i>WPHL</i>: Discussing the shipping backup at the LA and NY-NJ regional Ports during the pandemic <i>NBC 10</i>: Full length feature interview discussing the grocery item shortage and the shipping backup during the pandemic
May 2020	<ul style="list-style-type: none"> <i>NBC 10</i>: Meat supply chain issues at the beginning of the pandemic <i>NJTV News</i>: Supply Chain issues related to meat and toilet paper shortage

Skills and memberships

Software	<ul style="list-style-type: none"> Python, R, SAS, SPSS, Tableau, JMP, C++, Java, Matlab, AMPL
Memberships	<ul style="list-style-type: none"> Member of Beta Gamma Sigma Honor Society. Member of INFORMS, POMS, DSI and SIAM.

Ad Hoc Referee

- Decision Sciences
- IEEE Transactions on Control of Network Systems
- IEEE Control Systems Letters
- IEEE Transactions on Automatic Control
- Annals of Operational Research
- Naval Research Logistics
- Production and Operations Management
- Manufacturing and Service Operations Management
- European Journal of Operational Research
- International Journal of Applied Decision Sciences

Awards

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| 2023 | ■ Chancellors Award: Faculty Research Award for Scientific Contributions Toward Diversity and Inclusion |
| 2022 | ■ Summer fellowship, Rutgers University- Camden |
| 2016-2018 | ■ Lindback emerging scholar award, La Salle University |
| 2013-2014 | ■ Summer fellowship, La Salle University |
| 2011-2012 | ■ Summer fellowship, Ithaca College |
| 2006-2008 | ■ Academic fellowship, Rutgers University- Newark |
| 2004-2005 | ■ Dual degree scholarship, Indian Institute of Technology, Bombay |