Zlatana Dobrilova Nenova

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RESEARCH INTERESTS

Healthcare Analytics & Decision Making, Data Mining, Dynamic Programming

TEACHING INTERESTS

Data Mining, Statistics, Healthcare Analytics & Decision Making, Optimization

EDUCATION University of Pittsburgh, Pittsburgh, PA

Ph.D., Business Analytics and Operations, 2017

• Dissertation Topic: "Essays on the Management of Appointments for Chronic Conditions."

• Advisor: Jennifer Shang

M.A., Applied Statistics, 2013

Guilford College, Greensboro, NC

B.S., Mathematics & Accounting, 2011

Honors and Awards University of Denver, Denver, CO

Summer Research Grant, 2019 – present.

Faculty Research Fund, Fall 2020.

Pittsburgh Supercomputing Center, Pittsburgh, PA

Research Grant, 2019.

MDM Annual North American Meeting, Vancouver, BC, Canada

Lee B. Lusted Student Poster Competition Finalist, 2016.

University of Pittsburgh, Pittsburgh, PA

ELG Fellowship, 2013.

PUBLICATIONS

Nenova, Z., Shang, J. (2022). Personalized Chronic Disease Follow-Up Appointments: Risk-Stratified Care Through Big Data. *Production and Operations Management*, 31(2), 583–606. [FT50/UTD]

Nenova, Z., Shang, J. (2022). Chronic disease progression prediction: Leveraging case-based reasoning and big data analytics. *Production and Operations Management*, 31(1), 259–280. [FT50/UTD]

Nenova, Z., Hotchkiss Jr, J. (2019). Appointment utilization as a trigger for palliative care introduction: A retrospective cohort study. *Palliative Medicine*, 33(4), 457–461. [Impact Factor: 5.713]

Nenova, Z. D., May, J. H. (2016). Determining an Optimal Hierarchical Forecasting Model Based on the Characteristics of the Data Set: Technical note. *Journal of Operations Management*, 44, 62–68. [FT50/UTD]

BOOK CHAPTERS

Anderson, D., Bjarnadottir, M. V., Nenova, Z. (2022). Machine learning in healthcare: Operational and financial impact. *Innovative Technology at the Interface of Finance and Operations: Volume I*, 153–174.

Papers in Preparation

Nenova, Z. D., and Bartelt, V. (2023). Predicting resource utilization patterns in chronically ill patients. Working paper. Under Review at *Decision Sciences*. [**Premier**]

Bartelt, V., Nenova, Z. D., Marabelli, M., Majchrzak A. (2023). Competitive Aspects of Collaborations: Evidence and Theorizing from a Controlled Experiment. Working paper. Finalizing Revision for *Journal of Applied Psychology*. [FT50]

Nenova, Z. D., Bjarnadottir M., Marks, M. (2023). The Effect of Sober Living Homes on People in Recovery. Working paper. Revising for *Journal of the American Medical Informatics Association*. [Impact Factor: 7.942]

Nenova, Z. D., Eargle, D., Bartelt, V., Galletta, D. (2023) A Spoonful of Sugar: Disentangling the Joint and Separate Impacts of Source and Content Friendliness in Political News. Working paper. Revising for *Journal of Applied Psychology*. [FT50]

Nenova, Z. D., Zhang, D., and Laguna, M. (2023). Approximate Dynamic Programming for a Dynamic Appointment Scheduling Problem. Working paper. Revising for *Manufacturing and Service Operations Management*. [FT50/UTD]

Nenova, Z. D., Eargle, V., Galletta, D. (2023). Tolerance to Ambiguity and Openness to Diverse News Sources Across Political Groups. Work in Progress. Targeting *Nature*. [Impact Factor: **69.504**]

Nenova, Z.D., Williams, B. (2023) Quantifying the benefits of seeking specialty care. Work in Progress. Targeting *Production and Operations Management*. [FT50/UTD]

Foster, K., Nenova, Z.D., Shang, J. (2023) Balancing Emergency Physicians and Advanced Practice Providers. Work in Progress. Targeting *Journal of Operations Management*. [FT50/UTD]

ACADEMIC EXPERIENCE

University of Denver, Denver, CO ¹

Assistant Professor

September, 2017 – present

Daniels College of Business

• INFO 3980 - Internship

- INFO 4300 Predictive Analytics Evaluations: Spg '22 - 100.00; Spg '21 - 92.11; F '20 - 100.00.
- Evaluations: Spg '22 100.00; Sum '21 100.00; Spg '21 100.00.
- INFO 3200 Data Mining & Visualization Evaluations: Spg '20 - 93.44; Spg '19 - 87.81.
- INFO 2020 Analytics III: Business Modeling & Analysis
 Evaluations: Spg '22 94.44; Spg '21 100.00; F '20 88.89; W '20 82.05; W '19 89.58.
- INFO 1020 Analytics II: Business Statistics & Analysis Evaluations: Spg '18 84.43; W '18 92.54.

University of Pittsburgh, Pittsburgh, PA ²

Instructor

January, 2016 - April, 2017

College of Business Administration

• BUSSCM 1760 Data Mining (Spg '17 - 4.17 out of 5).

The Joseph M. Katz Graduate School of Business

- BQOM 2401 Uncertainty, Prediction & Quality Improvement (Sum '16 4.06 out of 5).
- BQOM 2401 Uncertainty, Prediction & Quality Improvement (Spg '16 3.38 out of 5).

¹Evaluation Score – Top 3 boxes pct. in "Overall, this is an effective instructor." aggregated across sections.

²Evaluation Score – Average in "Overall, this is an effective instructor."

Teaching Assistant

The Joseph M. Katz Graduate School of Business

- BQOM 2401 Uncertainty, Prediction & Quality Improvement MBA.
- BQOM 2801 Uncertainty, Prediction & Quality Improvement EMBA.
- BQOM 2421 Decision Technologies in Management & Operations Management MBA.
- BQOM 2811 Decision Technologies in Management & Operations Management EMBA.

Kenneth P. Dietrich School of Arts and Sciences

- MATH 0120 Business Calculus undergraduate.
- MATH 0220 Analytic Geometry and Calculus 1 undergraduate.
- STAT 1000 Applied Statistical Methods undergraduate.
- STAT 1100 Statistics & Probability for Business Management undergraduate.

INVITED SEMINARS Department of Strategy, Entrepreneurship & Operations, University of Colorado Boulder, May 2019.

Conference Presentations

Predicting resource utilization patterns in chronically ill patients. POMS 33th Annual Conference, Orlando FL, May 2023. Forthcoming.

Quantifying the benefits of seeking specialty care. POMS 33th Annual Conference, Orlando FL, May 2023. Forthcoming.

The Effect of Sober Living Homes on People in Recovery. INFORMS Healthcare Conference, Virtual, July 2021.

A Spoonful of Sugar: Disentangling the Joint and Separate Impacts of Source and Content Friendliness in Political News. INFORMS Annual Meeting, Virtual, November 2020.

Approximate Dynamic Programming for a Dynamic Appointment Scheduling Problem. POMS 30th Annual Conference, Washington DC, May 2019.

Approximate Dynamic Programming for a Dynamic Appointment Scheduling Problem. INFORMS Annual Meeting, Phoenix, November 2018.

An Integrated Framework for Follow-up Care Optimization and Demand-for-Care Estimation: The Case of Chronic Disease Management. University of Denver, Daniels Colloquium, Denver, May 2018.

An Integrated Framework for Follow-up Care Optimization and Demand-for-Care Estimation: The Case of Chronic Disease Management. Rocky Mountains INFORMS Meeting, Denver, May 2018.

Optimal Strategies For Monitoring And Prediction Of Chronic Kidney Disease Demand-for-Care. INFORMS Annual Meeting, Houston, October 2017.

Optimal Appointment Policy Selection for Chronic Kidney Disease Patients. INFORMS Healthcare Conference, Rotterdam, July 2017.

Chronic Kidney Disease: A Simulation Study. INFORMS Annual Meeting, Nashville, November 2016.

Chronic Kidney Disease Progression: A Simulation Model. INFORMS International, Hawaii, June 2016.

Chronic Kidney Disease Progression: A Simulation Model. CORS Annual Meeting, Banff, May

Appointment Scheduling Based on Continuous and Periodically Reported Data. *INFORMS Annual Meeting*, Philadelphia, November 2015.

Modeling Shared Medical Appointments. INFORMS Healthcare Conference, Nashville, July 2015.

Determining an Optimal Hierarchical Forecasting Model Based on the Characteristics of the Data Set. *INFORMS Annual Meeting*, San Francisco, November 2014.

Determining an Optimal Hierarchical Forecasting Model Based on the Characteristics of the Data Set. *IFORS*, Barcelona, July 2014.

Conference Poster

Chronic Kidney Disease Grouping Characteristics Across Different Geographical Regions, *MDM Annual North American Meeting*, Vancouver, October 2016.

Professional Affiliation

Institute for Operations Research & the Management Sciences (INFORMS)

- Health Applications.
- Data Mining.
- Analytics.
- Women in OR/MS.

Production and Operations Management Society (POMS)

- Health Applications.
- Data Mining.
- Analytics.

SERVICE

Institute for Operations Research & the Management Sciences (INFORMS)

- Invited Session Chair: INFORMS Annual Meeting, Phoenix, November 2018.
- Invited Session Chair: INFORMS Annual Meeting, Houston, October 2017.
- Invited Session Chair: INFORMS Healthcare Conference, Rotterdam, July 2017.
- Invited Session Chair: INFORMS Annual Meeting, Nashville, November 2016.

Completed Student Supervision

- Tanisha Maredia: University of Denver, Capstone Adviser, Summer 2022.
- Caoshan He: University of Denver, Capstone Adviser, Winter 2022.
- Caleb Bruce: University of Denver, Daniels Distinction Thesis Adviser, Spring 2021.
- Thitikarn Kanchanachat: University of Denver, Capstone Adviser, Spring 2021.
- Norbert Peyfuss: University of Denver, Capstone Adviser, Winter 2021.
- Yueqi Wang: University of Denver, Capstone Adviser, Winter 2021.
- Yinong Dong: University of Denver, Capstone Adviser, Winter 2021.
- Patricio Gilly Martinez de Alva: University of Denver, Capstone Adviser, Winter 2021.
- Jasmine Shang: University of Denver, Capstone Adviser, Summer 2020.
- Andrew Hicks: University of Denver, Capstone Adviser, Winter 2020.
- Andrew Lerner: University of Denver, Capstone Adviser, Fall 2019.
- Dami Kukoyi: University of Denver, Capstone Adviser, Summer 2019.
- Liang Lu: University of Denver, Capstone Adviser, Spring 2019.
- Botian Cao: University of Denver, Capstone Adviser, Spring 2018.

Ongoing Student Supervision

• Andrew Schuck: University of Denver, Capstone Adviser.

Reviewer

• Journals: Journal of Operations Management, Journal of Management Information Systems, Health Care Management Science, International Journal of Operational Research, Machine Learn-

ing, Palliative Care.
• Conferences: AMCIS, BIBE, WITS.