

# Sandeep Rath

Kenan Flagler Business School  
University of North Carolina  
McColl 4705  
CB# 3490  
Chapel Hill, NC 27599

Phone: (919) 962-3818  
Fax: (919) 962-6949  
Email: [sandeep@unc.edu](mailto:sandeep@unc.edu)  
Homepage: [rathsandeep.github.io](https://rathsandeep.github.io)

## Education

### **UCLA Anderson School of Management, Los Angeles**

Ph.D. Management, June, 2016.

*Dissertation Title:* Resource Planning Models for Healthcare Organizations.

*Dissertation committee:* Kumar Rajaram (chair), Felipe Caro, Uday Karmarkar, Aman Mahajan.

### **Indian Institute of Technology, Kharagpur**

M.Tech. Instrumentation Engineering, 2006.

B.Tech. Electrical Engineering, 2006.

– Minor, Electronics and Telecommunication Engineering.

## Professional Experience

### **Kenan-Flagler Business School, University of North Carolina at Chapel Hill**

Assistant Professor, 2016–present.

### **Indian School of Business, Hyderabad**

Visiting Faculty, 2024.

### **UCLA Anderson School of Management, Los Angeles**

Teaching Assistant, Executive MBA Program, Fall 2016.

Teaching Assistant, Fully Employed MBA Program, Fall Quarters of 2012–2016.

### **Indian School of Business, Hyderabad**

Research Associate, 2010–2011.

### **Schlumberger Ltd., Pune**

Business Analyst, 2008–2009

Manufacturing Engineer, 2007–2008.

### **ITC Ltd., Chennai**

Assistant Manager 2006–2007.

## Honors

Bullard Faculty Research Impact Award, 2024 (co-winner with Vinayak Deshpande)

Nominated for Weatherspoon Undergraduate Teaching Award, 2023

POMS CHOM Research-in-Practice Showcase Presentation, 2022

Finalist, INFORMS Innovative Application in Analytics Award, 2022

UCLA Dissertation Year Fellowship, 2015–2016.

UCLA Anderson Doctoral Fellowship, 2011–2015.

Fellowship for Post Graduate Studies, Government of India, 2005–2006.

National Talent Search Examination Scholarship, Government of India, 1999–2005.

## Publications

### *Peer-Reviewed Journal Articles*

\* indicates healthcare practitioner or physician collaborator

Celik U., **Rath, S.**, Kesavan S., Staats B. (2024). Does Physician Choice of When to Perform EHR Tasks Influence Total EHR Workload? (35 pages) *Published online M&SOM*.

Deshpande V., Mundru N., **Rath, S.**, \*Knowles M., \*Rowe D., \*Wood B.C. (2023). Data-Driven Surgical Tray Optimization to Improve Operating Room Efficiency *Operations Research* (35 pages).

- Finalist, INFORMS Innovative Application in Analytics Award (2022)
- Selected for POMS College of Healthcare Operations Management Research-in-Practice Showcase Presentations (2022)
- Media Coverage: Collaborating to Cut Hospital Costs (<https://www.kenan-flagler.unc.edu/research/collaborating-to-cut-hospital-costs/>)

**Rath, S.**, & Rajaram, K. (2022). Staff Planning for Hospitals with Implicit Cost Estimation and Stochastic Optimization. *Production and Operations Management*, 31(3), 1271-1289.

- Media Coverage: A Scheduling Tool that Considers Employee Preferences *UCLA Anderson Review* (Nov 2021)

**Rath, S.**, Rajaram, K., & \*Mahajan, A. (2017). Integrated Anesthesiologist and Room Scheduling for Surgeries: Methodology and Application. *Operations Research*, 65(6), 1460-1478. (18 pages).

Wood, B.C., Konchan, S., Gay, S., **Rath, S.**, Deshpande, V. and Knowles, M., (2021). Data analysis of plastic surgery instrument trays yields significant cost savings and efficiency gains. *Annals of Plastic Surgery*, 86(6S), pp.S635-S639.

Knowles, M., Gay, S.S., Konchan, S.K., Mendes, R., **Rath, S.**, Deshpande, V., Farber, M.A. and Wood, B.C., (2021). Data analysis of vascular surgery instrument trays yielded large cost and efficiency savings. *Journal of Vascular Surgery*, 73(6), pp.2144-2153.

Deo, S., Rajaram, K., **Rath, S.**, Karmarkar, U. S., & \*Goetz, M. B. (2015). Planning for HIV Screening, Testing, and Care at the Veterans Health Administration. *Operations Research*, 63(2), 287-304 (18 pages).

*Articles Under Review/Revision*

**Rath, S.** Rajaram K., \*Hudson, M.E., \*Mahajan A., Multi-location, Dynamic Staff Planning for a Healthcare System: Methodology and Application (37 pages) (*Under Review*)

**Rath, S.**, Swaminathan, J.M., \*Coleman C., Collaborative Care for Mental and Physical Health (32 pages) (*Under Review*)

Celik U., **Rath, S.**, Staats B., Reducing Appointment Delays: The Impact of Standardized EHR Usage on Physician Timeliness (*Under Review*)

*Work in Progress*

**Rath, S.**, \*Lim M., Data-Driven Surgical Block Release Planning (*Data collection complete, analysis in progress*)

*Other Published Articles*

Rajaram, K., & **Rath, S.** (2017). Managing the Operating Room Suite at UCLA Ronald Reagan Medical Center. *Impact*, 3(2), 31-35.

**Teaching Record**

*Indian School of Business, Hyderabad, PGP Program in Management*

PADM: Prescriptive Analytics for Business Decision Making 2024,

*UNC Chapel Hill, Kenan-Flagler Business School, Undergraduate Program*

BUSI 403: Operations Management Spring 2017-2025,

BUSI 532H: Healthcare and Service Operations Management Spring 2018-2025,

**Peer-Reviewed Conference Presentations**

*Data-Driven Surgical Tray Optimization to Improve Operating Room Efficiency*

POMS College of Healthcare Operations Management Research-in-Practice Showcase Presentation (2022)

*Collaborative Care for Mental and Physical Health*

Manufacturing & Service Operations Management Conference, 2022.

Manufacturing & Service Operations Management Conference, 2021.

*Staff Planning for Hospitals with Cost Estimation and Optimization*

Manufacturing & Service Operations Management Conference, 2019.

Manufacturing & Service Operations Management Conference, 2018.

## Invited Conference Presentations

### *Data-Driven Approach to the Surgical Block Release Decision*

INFORMS Annual Meeting (Seattle 2024, scheduled), INFORMS Annual Meeting (Phoenix 2023)

### *Multilocation, Dynamic Staff Planning for a Healthcare System: Methodology and Application*

POMS Annual Meeting (Orlando 2023)

### *Data-driven Workforce Planning For Healthcare Organizations*

INFORMS Annual Meeting (Indianapolis 2022)

### *Data-Driven Surgical Tray Optimization to Improve Operating Room Efficiency*

POMS Annual Meeting (Online, 2022)

### *Appointment Scheduling with Off-line Discretionary Work*

POMS Annual Conference (Online, 2022), INFORMS Annual Meeting (Anaheim 2021).

### *Collaborative Care for Mental and Physical Health*

POMS Annual Conference (Online, 2022), POMS Annual Conference (Online, 2021), INFORMS Annual Meeting (Seattle, 2019), INFORMS Healthcare (Boston, 2019), INFORMS Annual Meeting (Phoenix 2018).

### *Staff Planning For Anesthesiologists*

INFORMS Annual Meeting (Seattle, 2019), INFORMS Healthcare (Boston, 2019), INFORMS Annual Meeting (Houston, 2017), INFORMS Annual Meeting (Nashville, 2016)

### *Integrated Staff and Room Scheduling for Surgeries*

INFORMS Healthcare (Rotterdam, 2017), INFORMS Annual Meeting (Nashville, 2016), INFORMS Annual Meeting (Philadelphia, 2015), INFORMS Healthcare, (Nashville, 2015)

### *Planning for HIV Screening, Testing, and Care*

INFORMS Annual Meeting, San Francisco, 2014.

## Other Invited Presentations

University of Kansas School of Business, 2024

Workshop in Management Science, San Pedro de Atacama, Chile, 2023

Carlson School of Management, University of Minnesota, 2023

Johns Hopkins Carey Business School (2023)

Robert H. Smith School of Business, University of Maryland, 2023

UNC Kenan-Flagler Center for the Business of Health Faculty Research Share Session, 2023

Midwest Healthcare Workshop, Geis College of Business, UIUC, 2023

Department of Statistics and Operations Research, UNC, 2023

Sloan School of Management, MIT, 2023

Carroll School of Management, Boston College, 2023

NC State Doing Good with OM/OR Workshop, 2022

Kelley School of Business, Indiana University, Consortium Friday Seminar Series (online), 2021

UNC Business of Healthcare Convocation, Chapel Hill, 2019

Kenan-Flagler Business School, University of North Carolina, Chapel-Hill, 2015.

Communication, Networks and Systems Seminar, University of Southern California, 2015.

Southern California OR/OM Day, Los Angeles, 2015.

DOTM Colloquium Series, UCLA Anderson, 2015.

## Professional Service

### *To the Discipline*

#### **Reviewer**

California Management Review, IISE Transactions, Management Science, Manufacturing & Service Operations Management, Naval Research Logistics, Operations Research, Production and Operations Management

#### **Judge**

INFORMS Health Application Society Best Student Paper Competition, 2023

INFORMS Public Sector OR Best Paper Competition, 2022

MSOM Conference Healthcare SIG, 2021, 2022, 2023, 2024

Pierskalla Best Paper Award, 2020

POMS College of Healthcare Operations Management, Best Paper Competition, 2017, 2020, 2021, 2022, 2023

#### **Conference Track Chair**

POMS Annual Meeting, Orlando (2023)

#### **Conference Session Chair**

INFORMS Annual Meetings: Phoenix (*scheduled*, 2023), Anaheim (2021), Seattle (2019), Phoenix (2018, co-chair with Jayashankar Swaminathan), Houston (2017), Philadelphia (2015)

INFORMS Healthcare: Toronto (*scheduled*, 2023), Boston (2019), Nashville (2015)

### *Within UNC Chapel Hill*

Organizing Committee Member, UNC Healthcare Operations Workshop, 2019

Operations Area Faculty Seminar Series, Chair, 2017-2019.

Organizing Committee Member, Manufacturing & Service Operations Management Conference, 2017.

## References

*Available on request*