## **CURRICULUM VITAE**

# Alan Bowman, Ph.D. Professor of Operations and Information Systems Clarkson University School of Business February 28, 2021

## I. Education

Ph.D., Operations Research, Cornell University, 1990 M.B.A., Arizona State University, 1986 B.S., Industrial Engineering, Arizona State University, 1980

# II. Academic Honors and Awards

IBM Manufacturing Fellowship Award Winner Tau Beta Pi, Industrial Engineering Honor Society Dean's List Summa Cum Laude

# III. Areas of Specialization

Operations Research, Operations Management, Simulation

# IV. Academic Experience

Professor, Clarkson University, since 2016.
Professor, Union Graduate College, 2003-2016.
Professor, Union College, 1990-2003.
Senior Associate Dean of Graduate Business Programs, Clarkson University, 2016-18.
Associate Dean, School of Management, Union Graduate College 2009-2016.
Interim Dean, School of Management, Union Graduate College, 2011, 2015-16.

# V. Professional Experience

Internal Management Consultant, Salt River Project Electric/Water Utility, 1982-1986 Industrial Engineer, Reynolds Aluminum, 1978-1982.

# VI. Courses Taught

Calculus Probability Operations Management
Business Process Simulation
Management Science
Health Care Operations Research
Decision Analysis and Supply Chain Modeling
Healthcare Operations Management

# VII. Scholarship

#### Peer reviewed Journal Articles Published

- 1. R. Alan Bowman. Developing Optimal Student Plans of Study. To appear in <u>Informs</u> <u>Journal for Applied Analytics</u>.
- 2. R. Alan Bowman. Student Trajectories for Enrollment Forecasting. To appear in <u>AIR Professional File.</u>
- 3. R. Alan Bowman, James Lambrinos & Thomas Ashman, "Prospective Measures of Competitive Balance: Application to Money Lines in the National Hockey League", <u>Applied Economics</u>, Vol. 50, No. 46, 2018, pp. 4925-4936.
- 4. Bowman, R. Alan, Thomas Ashman and James Lambrinos. "Warriors or Bulls Introducing Retroactive Gambling Line Simulation". <u>Proceedings of the 2017 Winter Simulation Conference</u>, pp. 837-848.
- 5. Huppertz, John W., R. Alan Bowman, George Bizer, Mandeep Sidhu, and Colleen McVeigh, "Hospital Advertising, Competition, and HCAHPS: Does It Pay to Advertise?", Health Services Research, 52:4, 2017, pp. 1590-1611.
- 6. R. Alan Bowman, Thomas Ashman and James Lambrinos, "Using Sports Wagering Markets to Evaluate and Compare Team Winning Streaks in Sports", <u>American Journal of Operations Research</u>, 5, 2015, pp. 357-366.
- 7. R. Alan Bowman, Thomas Ashman and James Lambrinos, "Prospective Measures of Competitive Balance: Application to Money Lines in Major League Baseball", <u>Applied Economics</u>, Vol. 45, No. 29, 2013, pp. 4071-4081.
- 8. R. Alan Bowman, James Lambrinos and Thomas Ashman, "Competitive Balance in the Eyes of the Sports Fan: Prospective Measures Using Point Spreads in the NFL and NBA", <u>Journal of Sports Economics</u>, Vol. 14, No. 5, 2013, pp. 498-520.
- 9. R. Alan Bowman and Joef Schmee, "Shift, Narrow, and Chop to Improve Process Capability", <u>Proceedings of the 2011 Winter Simulation Conference</u>, pp. 3672-3683

- 10. Carlson, Jay, John W. Huppertz, R. Alan Bowman, James Lambrinos, Martin A. Strosberg and Natalia A. Kutzer, "Volunteering Time decisions: a multi-factor experimental study", <u>International Journal of Nonprofit and Voluntary Sector Marketing</u>, Vol. 14, 2011, pp. 1-16.
- 11. Ashman, Thomas, R. Alan Bowman and James Lambrinos, "The Role of Fatigue in NBA Wagering Markets: The Surprising "Home Disadvantage Situation", <u>Journal of Sports Economics</u>, Vol. 11, No. 6, December 2010, pp. 602-613.
- 12. Bowman, A., Doganaksoy, N., and Schmee, J. "Efficient Gradient-Based Optimization of Process Capability with Multiple Potentially Non-normal Response Variables," <u>Communications in Statistics – Simulation and Computation</u>, 39(4), 2010.
- 13. Bowman, R. Alan, "Efficient Sensitivity Analysis of PERT Network Performance Measures to Significant Changes in Activity Time Parameters," <u>Journal of the Operational Research Society</u>, Volume 58(10), 2007.
- 14. Bowman, R. Alan, "Developing Activity Duration Specification Limits for Effective Project Control," <u>European Journal of Operational Research</u>, Volume 174, 2006.
- 15. Bowman, Alan and Schmee, Josef, "Estimating Sensitivity of Process Capability Modeled by a Transfer Function," <u>Journal of Quality Technology</u>, Vol. 36 Number 2, 2004.
- 16. Bowman, R. Alan, "Sensitivity Curves for Effective Project Management," <u>Naval</u> <u>Research Logistics</u>, Volume 50, 2003.
- 17. Bowman, R. A., "Job Release Control Using a Cyclic Schedule," <u>Production and Operations Management</u>, Volume 11 Number 2, 2002.
- 18. Bowman, R. Alan., "Due Date-Based Metrics for Activity Importance in Stochastic Activity Networks" <u>Annals of Operations Research</u>, Volume 102, 2001.
- 19. Bowman, R. Alan. and Schmee, Josef, "Pricing and Managing a Maintenance Contract for a Fleet of Aircraft Engines", <u>Simulation</u>, Volume 76 Number 2, 2001.
- 20. Sox, C.R., Jackson, P.L., Bowman, R.A., And Muckstadt, J.A., "A Review of the Stochastic Lot Scheduling Problem," <u>International Journal of Production Economics</u>, Volume 62 Number 3, 1999.
- 21. Bowman, R.A., Haimowitz, I.M., Mattheyses, A.Y., and Phillips, M., "Discrete Time Simulation of an Equipment Rental Business," <u>Winter Simulation Conference</u> Proceedings, 1998.

- 22. Bowman, R.A., and Muckstadt, J.A., "Production Control of Cyclic Schedules with Demand and Process Variability," <u>Production and Operations Management</u>, Volume 2 Number 4, 1995.
- 23. Bowman, A., "Efficient Estimation of Arc Criticalities in Stochastic Activity Networks," Management Science, Volume 41 Number 1, 1995.
- 24. Bowman, R. Alan, "Stochastic Gradient-Based Time-Cost Tradeoffs in PERT Networks Using Simulation, Annals of Operations Research, Volume 53, 1994.
- 25. Bowman, R. Alan, "Inventory: The Opportunity Cost of Quality," IIE Transactions, Volume 26 Number 3, 1994.
- 26. Bowman, R. A. and Muckstadt, J. A., "Stochastic Analysis of Cyclic Schedules," Operations Research, Volume 41 Number 5, 1993.

# **Academic/Professional Meeting Presentations**

- Guikema, Seth, Steven Quiring, Ken Buckstaff, Mike Beck, Alan Bowman, Brent McRoberts, Roshanak Nateghi, "Power Outage Prediction for Adverse Weather Events". Presented (by Seth Guikema) at the 2018 JSM Conference in Vancouver.
- Bowman, R. Alan, Thomas Ashman and James Lambrinos. "Warriors or Bulls Introducing Retroactive Gambling Line Simulation". Presented at the 2017 Winter Simulation Conference.
- Bowman, A. "Resource Modeling for Storm Damage Preparedness Planning", Presented at the Storm Outage Prediction, Preparedness, and Response Workshop at Ohio State University, August 2017.
- Bowman, A. and Schmee, J. "Shift, Narrow, and Chop to Improve Process Capability", Presented at 2011 Winter Simulation Conference.
- Bowman, R. A. and Schmee, J. "Sensitivity Analysis of Process Capability With Extensions to Tolerancing Using a Transfer Function", Presented at INFORMS Conference, 2004.
- Bowman, R. A. and Schmee, J. "Sensitivity Analysis of Process Capability With Extensions to Tolerancing Using a Transfer Function", Presented at SAS Institute Conference, 2004.

- Bowman, R.A. "The Use of Computer Simulation in Project Management", Invited speaker at the February 2002 meeting of the Upstate New York Chapter of the Project Management Institute.
- Rosenblum, M., Bowman, R. A. and Dirani, R. "Using Survival Models to Predict the Start of Insulin in Patients With Type 2 Diabetes Mellitus," Presented at ISPOR Conference, 2002.
- Bowman, R.A., "Timing Material Flow into Bottlenecks Using a Cyclic Schedule," presented at INFORMS Conference in Montreal, 1998.
- Bowman, R.A., "Coordinating Vendor Replenishments with Volume Constraints and Demand Variability," presented at Spring POMS Conference in Pittsburgh, 1995.

#### VIII. Service Contributions

# **To Operations Management/Operations Research Community**

#### Referee for:

- Management Science
- Operations Research
- Annals of Operations Research
- International Journal of Project Management
- Production and Operations Management
- Journal on Computing
- IIE Transactions
- Operations Research Letters
- Naval Research Logistics
- Journal of the Operational Research Society
- Informs Journal of Applied Analytics

# To Union Graduate College / Clarkson University

• Advocate (Gender Equity) 2020-?

- E&M Faculty Search Committee 2020-21.
- Faculty Development Committee 2019-20.
- Senior Associate Dean of Graduate Business Programs, Clarkson University, 2016-2018.
- Associate Dean, School of Management, Union Graduate College 2009-2016.
- Interim Dean, School of Management, Union Graduate College, 2011, 2015-16.
- Advising Committee, 2014.
- Chair of 3<sup>rd</sup> Year Review Committee, 2014
- Admissions Committee, 1995-present.
- Waiver Committee Chair, 2001-present.
- Academic Advisor, Full Time MBA Students, 2004–present.
- Assessment Committee, 2007-2012.
- Personnel Committee, 2011 2014.
- Middle States, Co-Chair of Working Group 2, 2010-2011.
- Chair of Tenurability Ad Hoc Committee, 2009.
- Chair of Union Graduate School Faculty Executive Committee, 2006-2009.
- Chair of Curriculum Committee, 2006-2010.
- Program Chair, MBA Management, 1993-2004.
- Chair of Tenurability Ad Hoc Committee, 2002.
- Program Chair, MSIA, 1993-2002.
- Chair of Union Athletic Facilities Committee, 2000-2001.
- Middle States Accreditation Sub-Committee looking at Intellectual Life in the Classroom, 1998.

- Sub-Committee of the Faculty Review Board to Investigate Administrative Simplifications to the Ad Hoc Tenurability Process, 1998.
- Tenurability Ad Hoc Committee, Fall 1997.
- Chair of the Social Sciences Division and Member of the Campus-Wide Planning and Priorities Committee, September 1993 to June 1996.
- GMI Library Liaison, 1995.

# **To the Local Community**

- Board of Directors, Alplaus United Methodist Church, 2010 to present.
- Served on Board of Directors of Sofco-Mead, Inc., from 1991-1996.

# IX. Professional Memberships

• Member, INFORMS Professional Society for Operations Research/Management Science, 1990-present.

# X. Personal Development Activities

- Global Supply Chain Conference, Summer 2015, Clarkson University
- FDIB Conference, Summer 2012, Supply Chain track
- International Winter Simulation Conference, 1991, 2011.
- AACSB Integrated Curriculum Conference, Baltimore, November, 2007.
- Faculty Development in International Business, University of South Carolina, 2002.
- Summer Workshop on Experimental Learning in Operations Management at Cornell University, 1994, 1996.
- INFORMS Conference, 1994, 1998, 2004.
- POMS Conference, 1995.
- Union College Workshop on Collaborative Learning, 1993.