

## **CV is organized as follows**

1. Education (page 2)
2. Professional Experience (page 2)
3. Academic Honors (page 2-3)
4. Professional Achievements (pages 3-4)
5. Service to SF State University Campus (page 4-5)
6. Teamwork & Recognition awards at Bell Laboratories (page 5)
7. **Contributions to Research**
  - a. Journal Publications (pages 5-6)
  - b. Journal articles under review (page 7)
  - c. Journal manuscripts to be submitted (pages 7)
  - d. Conference presentations (pages 7-9)
  - e. Graduate (MBA) thesis projects advised (pp. 10-11)
8. **Contributions to Teaching**
  - a. Teaching Effectiveness at SFSU (page 11-12)
  - b. Brief Syllabus of courses taught at SFSU (pages 12-13)
  - c. Teaching Experience at other universities (pages 14)
9. Work experience at Bell Labs, Lucent Technologies
  - a. Role in different projects over 6 years (page 14)
10. Work experience in other industries (page 15)
11. References (page 16)

## RAMESH BOLLAPRAGADA

### Coordinates:

Tel: 415-338-7487 (work)

732-423-6128 (cell)

Email: [rameshb@sfsu.edu](mailto:rameshb@sfsu.edu)

### Address:

BUS 206A

College of Business, SF State University,  
San Francisco, CA 94103, U.S.A

---

### Education

**Ph.D. in Management of Manufacturing and Automation.**

**M. S. in Management of Manufacturing and Automation**

*Graduate School of Business and School of Computer Science,  
Carnegie Mellon University, Pittsburgh, PA, U.S.A.*

**M.S. in Systems and Control Engineering, India.**

**B.Tech. in Electrical & Electronics Engineering, India.**

### Website

<http://online.sfsu.edu/~rameshb>

### Professional Experience

- *Director of Research, Dean's office, College of Business, SFSU. 2016-*
- *Full Professor, 2012-*
- *Associate Professor (Tenured), 2007 -2012*  
*Assistant Professor, 2002 - 2007*  
Decision Sciences Department, College of Business, SF State University, San Francisco, USA
- *Research Scientist, (December, 1996 – August 2002)*  
Process Engineering & Network Planning Center, Bell Laboratories, Lucent Technologies, Holmdel, NJ.
- *Summer Intern, (May, 1994 – September, 1994)*  
Manufacturing Research Department, IBM T.J. Watson Research Center, Yorktown Heights, NY.

### Academic Honors

- *Visited 25 Countries on Research, Teaching*
- *Published 20 journal papers, Presented over 30 papers at International conferences*
- *Distinguished Faculty Award for Excellence in Professional Development (2014), Academic Senate, San Francisco State University. 2014. (equivalent of "lifetime achievement award in Research" at the University).*
- *Visiting Professor, Department of IEOR and Civil Engineering department, University of California, Berkeley (Spring 2017). Taught the 15-week Graduate elective course, "Supply Chain Management"*
- *Semi-finalist for Franz Edelman Award, November, 2016-17 for the Research, "Gridlock in the San Francisco Bay area: Mitigating Traffic Congestion using Operations Research Models*
- *Visiting Research Professor, Indian School of Business, Hyderabad, India (May-June, 2016) and (July-September 2014); Research with Prof. Sridhar Seshadri.*
- *Visiting Professor, Joint Nice-SF State MBA program. University of Nice at Sophia Antipolis, France (Jan 2008- March 2022). Taught Business Statistics for MBA students every year (80% was taught online, 20% was taught in person during spring break).*
- *Visiting Professor, University of Nice Shanghai Executive MBA program, Shanghai (November 26-27, 2016). Taught Supply Chain Management Executive program for CEOs/CTOs of 50 companies (80% was taught online, 20% was taught in person).*
- *Sabbatical Leave with pay award, Office of the President, SF State University, Spring 2016.*
- *Visiting Associate Professor, Haas School of Business, University of California, Berkeley (Fall 2011). Taught the 15-week MBA elective course, "Supply Chain Management"*
- *Visiting Professor, Administrative Staff College of India, India (July-August 2011). Research on "Traffic Congestion reduction in Southern states of India"*
- *Invited Speaker, Google's Forecasting Research Group, Mountain view, California (May 2010); Invited Speaker, Stanford University, Terman Engineering Center, Palo Alto, California (April 2010);*
- *Visiting Professor, HEC school of Management, Paris, France (March 2010 and June 2009). Research on "Two-stage, Two-product, Capacitated Supplier Problem with Uncertain Demand"*
- *Semi-finalist for Franz Edelman Award, November, 2009 for the Research, "Surge in Usage of FasTrak (Electronic Toll Collection System) on San Francisco Bay area Bridges"*

- **Outstanding teaching achievements at MBA level.** Taught a total of 30 MBA courses in past 15 years at SFSU. The average course rating is 1.5 of 5 (1 – Excellent, 5 – Poor). Courses taught include; Supply Chain Management, Operations Management, Business Forecasting, Computer Simulation & Business Modeling, Quality Management, Business Statistics, and Statistics & Operations Analysis for EMBA's.
- **Graduate Thesis Advisor for 25 MBA students at College of Business, SF State University (2005-2011)**
- **Sabbatical Leave with pay award, Office of the President, SF State University, Spring 2009.**
- **Visiting Professor, HEC school of Management, Paris, France (July, 2008).** Taught the Doctoral course, "Advanced Topics in Supply Chain Management"
- **Visiting Professor, Helsinki School Economics, Finland (July-August 2008).** Taught the Masters course, "Operations Control" in the Department of Business Technology.
- **Visiting Professor, S.P. Jain Institute of Management, Dubai (Jan, 2008).** Taught an Executive MBA course "Materials Management"
- **Early Tenure and Promotion to Associate Professor, Office of President, SFSU, CA (May, 2007)**
- **Visiting Professor, Department of Operations Management, Indian Institute of Management, Ahmedabad, India (January, 2007).** Taught a Doctoral course, "Quantitative Business Models in the Applications of Production Systems and Telecommunication Networks"
- **Appointed as Adjunct Faculty (Docent), Department of Logistics, Helsinki School of Economics, Finland, 2006 –current.**
- **Research Professor of Year Award (2005 – 2006), College of Business, SFSU, November 2006.**
- **Visiting Professor, University College, Cork, Ireland, July-August 2006.** Research on "Inventory Control using (R, S) policies under Non-Stationary Demand."
- **Research Professor of Year Award (2004 – 2005), College of Business, SFSU, May 2005**
- **Visiting Professor, Helsinki School of Economics, Finland, August 2005.** Taught a Masters/Doctoral course, "Operations Control: Applications in Production Systems and Telecommunications"
- **Visiting Professor, School of Computer Science, Carnegie Mellon University, Pittsburgh, PA (Jan, 2005).** Research on "Trading competition in Supply Chain Management Networks"
- **Visiting Professor, Politecnico Di Torino, Italy, January 2004.** Taught a Doctoral course, and initiated Research on "Discrete Time ELSP problem"
- **Finalist for Wagner Prize Award, October, 2004 for the Research, "Inventory Requirements Planning at Lucent Technologies"**
- **Visiting Professor, Department of Operations Management, Administrative Staff College, Bella Vista Campus, Hyderabad, India, May-July, 2004, and June 2003..** Research on "BPO Outsourcing"
- **Member of the INFORMS Prize winning team for Best Operations Research applications in an Organization (Lucent Technologies), Spring 1998.**
- **Graduate Research Fellowship, School of Computer Science, Carnegie Mellon Univ (CMU), 1994-96.**
- **William Larimer Mellon Fellowship, School of Business, Carnegie Mellon University, 1991-94**
- **Graduate Engineering Research Fellowship, India, 1988-89**
- **National Merit Scholarship, India, 1982-1988**

#### **Professional Achievements (2002- current):**

- **Co-advisor and dissertation committee member of 5 Doctoral students at top research universities in USA and Europe (2005-2018).** Written reports on their work to the evaluation committee.
- **Published 20 research journal articles, Reviewed 20 research articles for several International journals in USA and Europe (2003-2022).**
- **Visited 25 countries on research, teaching (2003-2022).** Visited several major universities in Europe, India and delivered research lectures and taught courses at Masters and Ph.D. level.
- **Regular attendee of the INFORMS national academic conference (1995-2022) in U.S.A.** Presented over 30 research papers, and chaired invited sessions several times.
- **Development of novel operations research and simulation models to affect the public policy decisions related to traffic congestion in the San Francisco Bay area (2007-current).** This is joint work with the Metropolitan Transportation Commission (MTC) and Bay area transportation agency (BATA).

- *The first project* is to improve the usage of FasTraK (electronic Bridge toll collection system) on all Bay area bridges. Compared to an increase in usage of 2% per year prior to our work, the usage rates went up by 10% in one year alone. In addition, this work resulted in increasing the FasTrak usage from 40% to 70% from 2006-2012, realizing MTC's target usage rate of 70% set in year 2000. *Appeared on San Francisco TV in 2007-2008 to discuss this project. The work has appeared in over two dozen newspapers in the entire State of California. It was also semi-finalist for the Franz Edelman award given by the INFORMS society in 2009 and in 2017.*  
(<https://www.informs.org/Recognizing-Excellence/INFORMS-Prizes/Franz-Edelman-Award>).

*This work was also presented in the Operations Management group at Stanford University, and the Forecasting group at Google's Mountain View Headquarters.*

- *The second project* (ongoing) relates to improving the traffic congestion on all highways in the San Francisco Bay area. An initial presentation was made to the Director of Highway operations at MTC, Oakland. Final recommendations are to be proposed in the next one year.
- *Interviewed by Tyre-Asia, for providing guidance on Supply Chain Management decisions in the Tyre Industry across the globe, April 2009.* Interview appeared in their major issue circulated across the globe, along with interviews of CEOs and CTOs of major companies.
- *Highlighted Research article:* "Managing Two-Stage Serial Inventory Systems under Demand and Supply Uncertainty and Customer Service Level Requirements," in *Industrial Engineer*, the professional magazine of the Institute of Industrial Engineers (IIE). *The honor is given to two most applied articles (out of all article published by the IIE Transaction journals in a month), February 2008.*
- Numerous Biographic listings in several societies in U.S and Europe, 2002-2022  
*BIOGRAPHIC LISITING from 2005- 2022: Marquis Who is Who in the World, Marquis Who is Who in America, Marquis Who is Who in Science & Engineering, Manchester's Who is Who, Scholar Universe*
- *Received Philanthropic Recognition Award from the "Board of Directors of the Statue of Liberty and Ellis Island Foundation, New York City" for contributions to Philanthropy*

#### **Service at SF State University Campus (2002 – current):**

- *Member of FHAC Committee (Faculty Honors and Awards Committee, SFSU 2014-2021), Chair of FHAC Committee, 2015-2017.*
- *Member of H RTP (Hiring, Retention, Tenure, Promotion) Committee, Decision Sciences department, College of Business 2007-2011, and 2011-2014, 2016-current. Chair of H RTP committee 2013-2014.*
- *Member of PDRC committee (College of Business), 2002-2004, and 2011-2014*
- *Member of UCC committee (College of Business), 2014-2016. Chair of UCC Committee, 2015-2016.*
- *Member of Academic Senate (SFSU) on Curriculum Review Academic Committee, 2005-2008*
- *Organized Decision Sciences department tutoring for the Core Operations Management Course (DS 412) from Spring 2009-Spring 2017. Coordinated tutoring help for over 750 students each semester. Also, participated along with all Decision Sciences faculty in the coaching of all operations management students, the week prior to the final exam week, 2007-2017.*
- *Advising duties in the department of Decision Sciences (DS), College of Business (2005-current)*
  - (1) Faculty Coordinator and Advisor for Core Operations Management , and Business Statistics classes (2005-current).
  - (2) Faculty Advisor for approving the graduation application for students specializing in the Decision Sciences department (Graduate and Bachelor levels) 2007-current.
- *Chair of JFRC (Junior Faculty Research Consortium), College of Business, SFSU, 2004-2005*

- Organized “Research Roundtable Meetings” in the College of Business, SFSU, 2004-2005
- Committee member of the “Professional Research Development” committee, SFSU (2002-2005).
- Participated in commencement activities every year (all college, MBA gradation, DS department graduation for undergraduates) 2004-current.
- Participated in SFSU Sneak Peak, an event to help all incoming freshman to the university with the curriculum and the selection of their majors. Represented the College of Business in 2009 and 2012.
- *Significant contributions to promote the Asian Indian culture on SF State campus (2005 – current).*  
*Received the “Outstanding Faculty Advisor Award”, given by the Office of International education.*
  - (1) Faculty Advisor for the Undergraduate Indian Student Association of SF State (2005- current),
  - (2) Faculty Advisor for the Indian Graduates Association of SF State, (2008-current),
  - (3) Faculty Advisor for the Dance Dhamaka Organization of SF State, (2009-current),
  - (4) Faculty Advisor for the Golden Gate Bhangra Organization of SF State, 2008-2010 (2 years).
- Committee member that defined the Curriculum for EMBA Program in Quantitative Business
- Faculty Advisor for Delta Sigma Pi, 2003-2004; Alpha Kappa Psi, 2015-current (SFSU campus).

**Personal Information:** *Citizen of the United States of America, and Overseas Citizen of India*

**Professional Affiliations** - Institute for Operations Research & Management Sciences (INFORMS), IEEE, AAI

**Teamwork & Recognition Awards at Bell Laboratories, Lucent Technologies (1997-2002)**

- *United States Patent 6917816 “Method and Apparatus for analyzing and designing various network configuration scenarios, “ Bell Laboratories, Lucent Technologies (July, 2005)*  
<http://patft.uspto.gov/netacgi/nph-Parser?patentnumber=6917816>
- Lucent CEO Excellence Stock options grant at Bell Laboratories, Lucent (1999, 2000, 2001)
- Bell Labs President Teamwork award on ADVance (configurators platform for Business Partners), 2002
- Bell Labs President Teamwork Recognition award on Network Planning project, 2000
- Bell Labs President Excellence award, Inventory & Supply Chain Management project, 1997-1998
- Key contributor on the Supply Chain optimization system Commercialized through Bell Labs, 1999
- Key member of Bell Laboratories team that helped win INFORMS prize for Lucent (1998)
- Organized highly successful companywide Distinguished Seminar talks in Operations Research at Bell Laboratories, Lucent Technologies (1998-2002).

**CONTRIBUTIONS TO RESEARCH:**

**Journal Publications**

**Economic Lot-sizing and Scheduling:**

"Single Stage Resource Allocation and Economic Lot Scheduling on Multiple, Non-identical Production Lines," Ramesh Bollapragada and Uday S. Rao, *Management Science*, Vol. 45, 1999.

“An Empirical Study of Policies to Integrate Reactive Scheduling and Control in Just-in-Time Job Shop Environments” Ramesh Bollapragada and Norman M. Sadeh. *International Journal of Production Research*, Vol. 42, 2004.

"Pro-active Release Procedures for Just-in-Time Job Shop Environments, Subject to Machine Failures," Ramesh Bollapragada and Norman M. Sadeh. *Naval Research Logistics*, Vol. 51, 2004

“Discrete-Time Economic Lot Scheduling Problem on Multiple Non-Identical Production Lines.” Ramesh Bollapragada, Federico Della Croce, and Marco Ghirardi. *European Journal of Operational Research*, Vol. 215, No. 1, November 2011.

### **Supply Chain & Inventory Management:**

“Managing Two-Stage Serial Inventory Systems under Demand and Supply Uncertainty and Customer Service Level Requirements,” Ramesh Bollapragada, Uday S. Rao and Jun Zhang. *IIE Transactions on Scheduling and Logistics*, Vol. 36, 2004.

“Inventory Requirements Planning at Lucent Technologies,” Alex Bangash, Ramesh Bollapragada, Rachele Klein, Narayan Raman, Herbert B. Shulman, Donald R. Smith. *Interfaces*, Vol. 34, 2004.

“Managing Inventories and Suppliers in Assembly Systems with Random Demand and Supply Capacity,” Ramesh Bollapragada, Uday S. Rao and Jun Zhang. *Management Science*, Vol. 50, 2004.

“Replenishment Planning in Discrete-time, Capacitated, Non-stationary, Stochastic Inventory Systems,” Ramesh Bollapragada and Uday S. Rao. *IIE Transactions on Scheduling and Logistics*, Vol. 38, 2006.

“Constraint-Based Local Search for Inventory Control under Stochastic Demand and Lead Time,” Roberto Rossi, Armagan Tarim and Ramesh Bollapragada. *INFORMS Journal of Computing*, Vol. 24, No. 1, Winter 2012.

“Role of Random Capacity Risk and the Retailer in Decentralized Supply Chains with Competing Suppliers,” Fei Qin, Uday S Rao, Haresh Gurnani, and Ramesh Bollapragada. *Decision Sciences Journal*, Vol. 45, No. 2, April 2014.

“Component Procurement and End Product Assembly in an Uncertain Supply and Demand Environment,” Ramesh Bollapragada, Uday S. Rao and Saravanan Kuppusamy. *International Journal of Production Research*, Vol. 53, No. 3, Feb. 2015.

“Inventory allocation models for a two-stage, two-product, capacitated supplier and retailer problem with random demand,” Kai Luo, Ramesh Bollapragada, Laoucine Kerbache. *International Journal of Production Economics*, Vol. 187, March.2017.

### **Telecommunications:**

“An Approach for Planning Broadband Wireless Networks,” Ramesh Bollapragada. *AIRO News, The Italian Operations Research Society*, IX, 2004.

“A Two-phase Greedy Algorithm to Locate and Allocate Hubs for Fixed-wireless Broadband Access,” Ramesh Bollapragada, Jeffrey Camm, Uday S. Rao and Joy Wu. *Operations Research Letters*, Vol. 33, 2005.

“Budget-constrained, Capacitated Hub Location to Maximize Expected Demand Coverage in Fixed-wireless Telecommunication Networks,” Ramesh Bollapragada, Yanjun Li and Uday S. Rao, *INFORMS Journal of Computing*, Vol. 18, 2006.

“Network Planning of Broadband Wireless Networks,” Ramesh Bollapragada, Thomas B. Morawski, Luz E. Pinzon, Steve H. Richman, Raymond Sackett. *Interfaces*, Vol. 37, 2007.

### **Transportation:**

“Forecasting, Regression and Simulation Models to Solve Traffic Problems in the State of Kerala,” Ramesh Bollapragada, Sudesh Poduval, Chetty, Bingi, Bhoomi Brahmhatt, *Vikalpa Journal, IIM Ahmedabad*, Decemeber, 2016

“Slow Progress of FasTrak: Usage Analysis of an Electronic Toll Collection System,” Hector Bedolla, Sanjit Sengupta and Ramesh Bollapragada. *Transportation Journal*, Vol. 46, 2007.

“Adoption of FasTrak on San Francisco Bay Area Bridges: Impact of Operations Research models in Relieving Congestion,” Ramesh Bollapragada, Venoo Kakar, John Goodwin and Andrew Fremier. *Accepted for Publication, INFORMS Journal on Applied Analytics*, February 2022.

**Energy:**

“Forecasting the Price of Crude Oil” Ramesh Bollapragada, Akash Mankude, V. Udayabhanu. *Decision Journal, IIM Calcutta, August 2021.*

**Finance:**

“Price Forecasting and Analysis of Exchange Traded Fund” Ramesh Bollapragada, Igor Savin and Laoucine Kerbache. *Journal of Mathematical Finance, March, 2013.*

**Journal Articles under review**

“Hub location-allocation for combined fixed-wireless and wireline broadband access” Ramesh Bollapragada, Uday S. Rao, and Junying Wu. *Submitted for publication.*

“Impacts of Deploying Six-Sigma Methodologies in Airline Operations,” Ramesh Bollapragada and Vivian Chan. *Submitted for publication.*

“Maintenance Scheduling of Fiber-Optic Networks,” Ramesh Bollapragada, Saravanan Kuppusamy, Uday Rao and Sridhar Seshadri. *Submitted for publication.*

**Journal Manuscripts (to be submitted)**

“Modeling Analysis and Computational Analysis for Component Procurement and End-product Assembly in Supply Chains Subject to Demand and Supply Uncertainty,” Ramesh Bollapragada, Uday Rao and Norman Sadeh. *To be submitted for publication.*

“Strategic Outsourcing guidance to Supply Chain Managers in Manufacturing, Logistics, IT and Services Industries: Analysis of Business Functions based on Empirical and Mathematical models,” Ramesh Bollapragada, B.S. Chetty, V. Udayabhanu, and. Zeynep Yalin. *To be submitted for publication.*

“Supply Chain Performance Measurement Metrics in the context of IBP-SAP Processes,” Ramesh Bollapragada, Ashutosh Bansal. *Work in Progress.*

“Analysis of Communication Styles, Project Management and Quality Management tools,” Ramesh Bollapragada, Inna Polozova, and V. Udayabhanu. *Work in Progress.*

“Forecasting the Economies of USA, India and China” Ramesh Bollapragada, Vivek Veluvali. *Work in Progress.*

**Conference Presentations**

- “Reducing Traffic Congestion on San Francisco Bay Area Highways and Bridges,” INFORMS Annual meeting, Anaheim, U.S.A, October 24-27, 2021.
- “Maintenance Scheduling of Fiber-Optic Networks,” Ramesh Bollapragada, Saravanan Kuppusamy, Uday Rao and Sridhar Seshadri. INFORMS Annual Meeting, Seattle, U.S.A. October 20-23, 2019.
- “Network Planning of Broadband Wireless Networks,” Ramesh Bollapragada. INFORMS International Annual Meeting, Cancun, Mexico June 9-12, 2019.
- “Six Sigma Quality in Airline Operations,” Ramesh Bollapragada and Vivian Chan. EURO Annual Meeting, Valencia, Spain. July 8-11, 2018.
- “Component Procurement and End Product Assembly in an Uncertain Supply and Demand Environment,” Ramesh Bollapragada, Saravanan Kuppusamy, Uday S. Rao. INFORMS Annual Meeting, Nashville, U.S.A. November 13-16, 2016.

- "Hub location-allocation for combined fixed-wireless and wireline broadband access," Ramesh Bollapragada, Min Li, Uday Rao, Junying Wu. INFORMS Annual Meeting, Philadelphia, U.S.A. November 1-4, 2015.
- "Reducing Traffic Congestion on all San Francisco Bay area Highways," Ramesh Bollapragada, Uyen Tran. INFORMS Annual Meeting, San Francisco, U.S.A. November 9-12, 2014.
- "Single Stage Resource Allocation and Economic Lot Scheduling on Multiple, Non-identical Production Lines," IIIM-B Research Seminar Series, Indian Institute of Management, Bangalore, August 1, 2014.
- "Surge in Usage of FasTrak (ETC Systems) on San Francisco Bay area Bridges," IIM-A Research Seminar Series, Indian Institute of Management, Ahmedabad, September 2, 2014.
- "Spreadsheet Based Optimization Models for Component Procurement and End-product Assembly," Ramesh Bollapragada, Robert Chan, Uday Rao, Norman Sadeh. INFORMS Annual Meeting, Phoenix, Arizona, U.S.A. October 13-17, 2012.
- "Impacts of Deploying Six Sigma Quality Control in Airline Operations," Ramesh Bollapragada and Vivian Chan. INFORMS Annual Meeting, Phoenix U.S.A., October 14-17 2012.
- "Supply Risk in Decentralized and Competitive Supply Chain," Fei Qin, Ramesh Bollapragada, Haresh Gurnani, and Uday Rao. INFORMS Annual Meeting, Charlotte, U.S.A., November 13-16, 2011.
- "Influence of the Suppliers' Capacity and Warehouse Capacity for Western and Asian Companies," Kai Luo, Ramesh Bollapragada, and Laoucine Kerbache. INFORMS Annual Meeting, Charlotte, U.S.A., November 13-16, 2011.
- "Two-stage, Two-product, Capacitated Supplier Problem with Uncertain Demand," Ramesh Bollapragada, Laoucine Kerbache, and Kai Luo. *INFORMS Annual Meeting, Austin, U.S.A., November 7-10, 2010.*
- "Key Metrics and Current Industry Practices in Supply Chain Measurement," Ramesh Bollapragada, Tuna Cencki, and Calvin Lee. *INFORMS Annual Meeting, Austin, U.S.A., November 7-10, 2010.*
- "Surge in Usage of FasTrak (Electronic Toll Collection System) on San Francisco Bay area Bridges: Impact of O.R. models in relieving traffic congestion, and improving productivity in the region," *Presented at Building 42 Conference center, Google, Mountain View Headquarters, U.S.A., May 19, 2010 and at Stanford University, Terman Engineering Center, U.S.A., April 7, 2010.*
- "Scheduling on Multiple, Non-Identical Production Lines," Ramesh Bollapragada. *Presented at Dept. of Industrial Eng. and Operations Research, U.C. Berkeley, U.S.A., April 12, 2010.*
- "An Analysis of Outsourcing Business Functions in Various Industries," Ramesh Bollapragada, Zeynep Yalin, Chetty Bingi, and Udayabhanu Vaidyanathan. *INFORMS Annual Meeting, San Diego, U.S.A., October 11-14, 2009.*
- "Slow Progress of FasTrak: Usage Analysis of an Electronic Toll Collection System," Ramesh Bollapragada, Sanjit Sengupta, and Hector Bedolla. *INFORMS Annual Meeting, Seattle, U.S.A., November 4-7, 2007.*
- "Discrete-Time Economic Lot Scheduling Problem on Multiple, Non-Identical Machines," Ramesh Bollapragada, Federico Della Croce, and Marco Ghirardi, *INFORMS Annual Meeting, Pittsburgh, U.S.A., November 5-8, 2006.*



- Honorary Invitee to the IDC conference on "Business Processes & Business Intelligence," Ramesh Bollapragada. *Presented work related to Business Processes in Telecommunications and Supply Chain Management. Marriot, Santa Clara, CA, U.S.A April 3-4, 2006.*
- "Scheduling for Optic-Fiber Financial Networks," Ramesh Bollapragada, Ozgur Ozluk, and Uday Rao. *INFORMS Annual Meeting, San Francisco, U.S.A., November 13-16, 2005.*
- "Single-Stage Resource Allocation and Economic Lot Scheduling on Multiple, Non-Identical Production Lines," Ramesh Bollapragada, and Uday Rao. *IFORS Conference, Honolulu, Hawaii, U.S.A, July 11-15, 2005.*
- "An Approach for Planning Broadband Wireless Networks," Ramesh Bollapragada. *INFORMS Annual Meeting, Denver, U.S.A. October 24-27, 2004.*
- "Inventory Management under Demand and Supply Uncertainty and Customer Service-level Requirements: Study of Single-Stage and Two-Stage (Serial, Assembly) Systems," Ramesh Bollapragada, Uday S. Rao & Jun Zhang. *EURO XX, Rhodes, Greece, Europe, July 4-7, 2004.*
- "Two-stage, Budget-Constrained, Capacitated, Telecom Hub Location-Allocation under Uncertain Demand," Ramesh Bollapragada, Jeffrey Camm, Uday Rao and Junying Wu. *INFORMS Annual Meeting, San Jose, U.S.A. November 2002.*
- "Budget-Constrained Capacitated Hub Location to Maximize Expected Demand Coverage in Fixed Wireless Telecommunications Networks," Ramesh Bollapragada, Yanjun Li, and Uday Rao. *INFORMS Annual Meeting, Miami, U.S.A. November 2001.*
- "Managing Component & End-Product Inventory under Demand & Supply Uncertainty & Customer Service Level Requirements," Ramesh Bollapragada, Uday Rao, and Jun Zhang. *INFORMS Annual Meeting, Philadelphia, U.S.A. November 1999.*
- "Uncertainty Modeling and Management in MRP Systems: Stochastic Planning Tools and some Managerial Insights," Ramesh Bollapragada. *EURO XVI, 16th European Conference on Operational Research, Brussels, Belgium, Europe, July 12-15, 1998.*
- "Intelligent Electronic Catalogs," Alex Bangash and Ramesh Bollapragada. *INFORMS Annual Meeting, Dallas, U.S.A. October 1997.*
- "Dynamic Job Shop Scheduling: A Comparative Study of Different Execution Strategies," Ramesh Bollapragada, Norman Sadeh, Jing Xing. *INFORMS Annual Meeting, Washington DC, U.S.A. May 1996.*
- "Uncertainty Management in Job Shop Scheduling," Ramesh Bollapragada and Norman Sadeh. *INFORMS Annual Meeting, New Orleans, U.S.A. November 1995.*
- "Batch Processing Control with Multi Part-types: Dynamic Critical Number Policy and Simulation Studies," Ram Akella, Ramesh Bollapragada, and Norman Sadeh. *ORSA/TIMS Annual Meeting, Phoenix, U.S.A. November 1993.*

### **Accreditation Conferences**

Attended the following Continuous Improvement (CIR) conferences in my role as Director of Research and Accreditation. Most of the attendees are Deans and Associate Deans of major universities from all over the world. See, <https://www.aacsb.edu/events/seminars/continuous-improvement-review>

- "AACSB annual Continuous Improvement Review Seminar," Washington DC, September 2018.
- "AACSB International conference for Business Schools," Honolulu Hawaii, April 2018.
- "AACSB annual Continuous Improvement conference," Pittsburgh, PA. September 2017.
- "AACSB annual Continuous Improvement conference," Minnesota. MN, September 2016.

## **MBA Thesis Projects Supervised at College of Business, SFSU (2005-current)**

- "Modeling U.S. Petroleum Production Using *Standard and Discounted Exponential Growth Approaches*," Mark Ciotola, May 2010.
- "*Forecasting and Inventory Management as Strategic and Sustained Competitive Advantage*," Neel Patel, December 2009 (Second reader on the thesis).
- "Adopting Web 2.0: Applying User-centric Principles to Supplement *Marketing Communication Programs*," Shinn Chen, October 2009 (Second reader on the thesis).
- "Impact of Deploying *Six Sigma Methodologies* in Airline Operations," Vivian Chan, Aug 2009.
- "Sensitivity Analysis of *Component Procurement Strategies on Supply Chain Costs*," Robert Chan, May 2009.
- "Analysis of the *Benefits of Supply Chain Centralization* under Different Demand Conditions," Jessica Yu, May 2009.
- "Establishing a *European Distribution Center* in the High Technology Industry," Julian Fix, December 2008.
- "India and China Economies Projected to Overtake United States Economy: *Analysis based on Forecasting Models*," Kunal Patel, December 2008.
- "Solving Traffic problems in the State of Kerala using *Forecasting and Simulation Models*," Sudesh Poduval, December 2008.
- "Reducing Commute Time in the San Francisco Bay Area using *Forecasting Models*," Uyen Tran, August 2008.
- "How Uncertainty in *Demand and Inventory* affect the Profitability of a Company," Bowo Triwacoko, August 2008.
- "Comparing *Supply Chains* between Developed & Developing Countries," Jessica Lau, Aug 2008.
- "A Study of *Drivers behind Lead-times* in Various Industries," Phuwat Charoenlap, May 2008.
- "*Optimization* of Employee Benefits Program Portfolio," Ching Yuen, May 2008.
- "An Analysis of *Outsourcing Business Functions* in Various Industries," Zeynep Yalin, December 2007.
- "The Effects of *Quality-Innovation Management* and the Development of the Quality-Innovation Cycle," Alan Yuen, August 2007.
- "Best Practices to *Measure Supply Chain Performance*," Tuna Cenkci, May 2007.
- "Investigations of the Relationship among *Manufacturing Strategies and their Impact on Business Performances*," Panu Vibunviriyawong, May 2007 (second reader on the thesis).
- "Tactics to improve Profit Maximization: *Forecasting and Revenue Management System* for the Hotel Industry," Aubrey Li, December 2006.
- "A Study of the Effectiveness of the FasTrak System of Toll Collection in San Francisco Bay Area, through *Forecasting and Marketing Models*" Hector Bedolla, May 2006.

- "Quality Techniques: Study of Investment Decision Approach for a Nail Manufacturer," Lanny Hoo, May 2006.
- "Analysis of *Project Management and Communication Styles* across various Businesses in San Francisco Bay Area," Inna Polozova, May 2006 (Second reader on the thesis).
- "Forecasting the Price of Crude Oil," Chiu-Pao Peng, December 2005 (Second reader on the thesis).
- "Price Forecasting and Analysis of *Exchange Traded Funds*," Igor Savin, May 2005.
- "Implementation of *Total Quality Management* in the Ceramic Tile Industry," Warit Lertchayuntee, May 2005.
- "An Alternative *Pricing Model* for Online Music Services," Angela Scott, May 2005 (Second reader on the thesis)

## **CONTRIBUTIONS TO TEACHING**

### **Teaching Effectiveness at SFSU**

**Classes Taught at College of Business, San Francisco State University:** *Over the past twenty years (2002-2022), I have taught over 30 courses for MBAs (2 core classes, and 4 electives), over 50 courses for undergraduate business students (2 core classes, and 1 elective).*

#### **Classes Taught (2002-2022)**

*For Graduate Business Students*, I taught the

- *Core Operations Analysis class (BUS 786)* in Fall 2003, Fall 2004, Spring 2006, Spring 2012, Fall 2017, Fall 2018, Spring 2019, Spring 2020, Fall 2020, Fall 2021.
- *Core Business Statistics class (BUS 776)* in Spring 2005, Spring 2018, Fall 2019.
- *Elective in Business Forecasting (DS 816)* in Fall 2004, Fall 2005, Fall 2009, Spring 2013, Spring 2014, Spring 2015, Spring 2021.
- *Elective in Supply Chain Management (DS 855)* in Fall 2007, Fall 2009, Fall 2010, Fall 2013, Spring 2022.
- *Elective in Total Quality Systems (DS 854)* in Spring 2005, Spring 2006, Spring 2007, Spring 2008.
- *Elective in Computer Simulation & Decision Making (DS 851)* in Spring 2010.
- *Elective in Managerial Decision Making (using Optimization models in Spreadsheets) (DS 852)* in Fall 2012, Fall 2015.
- *Core Operations Analysis class (BUS 786)* in Summer 2008, Summer 2009, Summer 2010

***For Undergraduate Business Students, I taught the***

- *Core Operations Management course (DS 412) over 40 times. I taught this course almost every semester (multiple sections), and also in some summer sessions as overload.*
- *Core Business Statistics class (DS 212) in Spring 2004, Spring 2005, Spring 2017, Spring 2018, Fall 2019.*
- *Elective in Quality Management (DS 624) in Spring 2006, Spring 2007, Spring 2008.*
- *Elective in Supply Chain Management (DS 655) in Spring 2020.*
- *Elective in Data Analysis with Computer Applications (DS 312) in Fall 2020.*

The teaching evaluations across the above courses in regular academic year is listed below (note that the courses taught in summer sessions are not evaluated). Specifically, an average across all questions in the student evaluations (Question 1- Question 7), and the average across Question 7 (overall quality of the instructor) are listed. The ratings are based on the following numbers:

**(1- Excellent, 2 – Good, 3- Average 4- Substandard 5 – Poor).**

**Recent Course evaluations (Years 2007-2019):**

- *Average across Q1-Q7 for 50 courses combined: 1.68*
- *Average across Q7 for 50 courses combined: 1.6*

*In addition to the regular academic courses listed above, I have taught as an overload the*

- *Comprehensive Statistics and Operations Analysis class (BUS 886) in the Executive MBA (EMBA) program in Summer 2005, Summer 2006, Fall 2006, and Summer 2007, Spring 2020.*

*I have also taught the following courses in the joint Nice-SFSU MBA program*

- *Business Statistics in Spring 2008, Spring 2009, Spring 2010, Spring 2012, Spring 2013, Spring 2014, Spring 2015, Spring 2016, Spring 2017, Spring 2018, Spring 2019.*

**Brief Syllabus of the courses taught at SFSU**

- *Topics covered in BUS 786 (Operations Analysis), and DS 412 (Operations Management) (Course length: 15-16 weeks).*
    - Supply Chain Management, Inventory Management, Material Requirements Planning, JIT
    - Quality Control, Acceptance Sampling, TQM and Quality Tools
    - Forecasting, Linear Programming, Facility Location
    - Project Management, Decision Analysis, Capacity Planning
- Text book: Stevenson, William J., Operations Management, 10<sup>th</sup> Edition, McGraw-Hill.*

- *Topics covered in the BUS 776 & DS 212 (Business Statistics) (Course length: 15-16 weeks).*
  - Descriptive Statistics, Probability Theory
  - Discrete Distributions, Continuous Distributions, Sampling Distributions
  - Statistical Inference, Hypothesis Testing, Regression Analysis

*Text book: Black, Ken., Business Statistics for Contemporary Decision Making, 5<sup>th</sup> Edition, Wiley.*
- *Topics covered in DS 855 & DS 655 (Supply Chain Management) (Course length: 15-16 weeks).*
  - Supply Chain Performance and Metrics, Distribution Networks in Supply Chain
  - Network Design, Demand Management and Aggregate Planning in Supply Chains
  - Managing Variability in Supply Chains, Cycle Stocks and Safety Stocks
  - Transportation and Sourcing Decisions in Supply Chains
  - Revenue Management, Coordination Decisions, IT and E-commerce in Supply Chains

*Text book: Chopra, Sunil & Meindl, Peter., Supply Chain Management, 6th Edition, Prentice-Hall*
- *Topics covered in DS 816 (Business Forecasting) (Course length: 15-16 weeks).*
  - Forecasting Data Patterns and Choosing a Forecasting Technique
  - Moving Averages and Smoothing Methods, Time Series and their Components
  - Simple Linear Regression, Multiple Regression Analysis, Regression with Time Series Data
  - The Box-Jenkins (ARIMA) Methodology, Judgmental Forecasting and Forecast Adjustments

*Text book: Hanke, John E. and Wichern Dean W., Business Forecasting, 8th Edition, Prentice-Hall*
- *Topics covered in DS 854 (Total Quality Systems) and DS 624 (Quality Management) (Course length: 15-16 weeks).*
  - Quality Basics, Quality Improvement
  - Variable Control Charts, Process Capability, Quality Control Charts for Attributes
  - Reliability, Advanced topics in Quality, ISO9000, Malcolm Baldrige Award, Six Sigma, Benchmarking and Auditing

*Text book: Summers, Donna., Quality, 4th Edition, Prentice-Hall.*
- *Topics covered in DS 851 (Computer Simulation & Decision Making) (Course length: 15-16 weeks).*
  - Fundamental Simulation Concepts, Guided Tour Through Arena
  - Modeling Basic Operations and Inputs, Modeling Detailed Operations
  - Statistical Analysis of Output from Terminating Simulations, Intermediate Modeling and Steady-State Statistical Analysis, Entity Transfer

*Text book: Kelton, Sadowski, Swets., Simulation with Arena, 5th Edition, McGraw-Hall.*
- *Topics covered in DS 852 (Managerial Decision Making) (Course length: 15-16 weeks).*
  - Basic and Advanced Excel Skills, Spreadsheet Engineering
  - Analysis using Spreadsheets & Data Analysis for Modeling, Regression Analysis
  - Non-linear Optimization, Linear Optimization, Network Models, Integer Optimization

*Text book: Powell, Stephen G. and Baker Kenneth R., Management Science: The Art of Modeling with Spreadsheets, 3rd Edition, John Wiley*

**Teaching Experience at other Universities (2004-2020):**

- **Visiting Professor, Dept. of IEOR and Civil Engineering , University of California, Berkeley** (Spring 2017). Taught the 15-week Engineering elective course, “Supply Chain Management”
- **Visiting Associate Professor, Haas School of Business, University of California, Berkeley** (Fall 2011). Taught the 15-week MBA elective course, “Supply Chain Management”
- **Visiting Professor, University of Nice, Nice, France** (March 2009-2020; Spring semester of every year for 10+ years); Taught Business Statistics for MBA students (80% was taught online, 20% of the course at University of Nice).
- **Visiting Professor, HEC school of Management, Paris, France** (July, 2008). Taught Doctoral Seminar course, "Advanced Topics in Supply Chain Management” (20- hour course)
- **Visiting Professor, Helsinki School of Economics, Finland** (July-August 2008). Taught Masters course, "Operations Control" in the Department of Business Technology & Logistics. (25-hour course)
- **Visiting Professor, S.P. Jain Institute of Management, Dubai** (Jan, 2008). Taught an Executive MBA course “Materials Management” (20-hour course)
- **Visiting Professor, Department of Operations Management, Indian Institute of Management, Ahmedabad, India** (January, 2007). Taught a Doctoral course, “Quantitative Business Models in the Applications of Production Systems and Telecommunication Networks” (30- hour course)
- **Visiting Professor, Helsinki School of Economics, Finland** (July 2005). Taught Masters Course, "Operations Control: Applications in Production Systems and Telecommunication Networks" in the Logistics department. (25-hour course)
- **Visiting Professor, Politecnico Di Torino, Italy, January 2004**. Taught a Doctoral course, “Quantitative Business Models in the Design & Operation of Production Systems and Telecommunication Networks” in the Department of Systems and Automation. (30-hour course)

Sample teaching evaluations for some of the above courses are listed below. Ph.D. courses were generally not evaluated. The course taught in the Joint Nice-SFSU MBA program is not evaluated.

Teaching Experience (Ph.D. course) Visiting Professor, Helsinki School of Economics, Finland, August 2005. Taught an Doctoral course, “Operations Control: Applications in Production Systems and Telecommunication Networks”  
Teaching Rating (Evaluation across 10 questions): **6.4**  
(7- Excellent..... 1 – Poor)

Teaching Experience (Ph.D. course) Visiting Professor, Politecnico Di Torino, Italy, January 2004. Taught a Doctoral course, “Quantitative Business Models in the Design and Operation of Production Systems and Telecommunication Networks”  
Teaching Rating (Evaluation across 14 questions): **1.4**  
(1- Excellent, 2- Good, 3 – Average, 4 – Substandard, 5 – Poor)

Teaching Experience at B-School, Carnegie Mellon (1992-1996) Instructor for Production, Senior Undergraduate Course; Summer, 1995 (Course Rating: 4.56 Teaching Rating: 4.33)  
(5 – Excellent, 4 – Good, 3 – Average, 2 – Substandard, 1 – Poor)  
Teaching Assistant for Linear Programming, Ph.D. Course; Fall ‘95, Fall ‘93  
Co-Instructor for Production, Undergraduate Course; Spring ‘95, Spring ‘94  
Teaching Assistant for Computational Economics, MBA Course; Spring ‘95  
Teaching Assistant for Computer Integrated Manufacturing, MBA Course; Spring ‘94  
Teaching Assistant for Operations Research, MBA Course; Fall ‘93, Sum ‘93, Fall’92  
Teaching Assistant for Probability and Statistics, MBA Course; Fall 1992

## **Work Experience (prior to joining SFSU)**

### **Bell Laboratories, Lucent Technologies (6 years)**

*(I) Systems Engineer and Consultant in Process Engineering (2 years)*

1. Systems Architect, Consultant and Systems Engineer in Inventory management and Supply chain management:

The inventory management projects across different implementations resulted in

(a) An annual savings of **\$11M** in inventory, and a **13%** increase in service level for the optical networking manufacturing division (b) An annual savings of **\$3M** in inventory, and a **20%** increase in service level for the fiber optic apparatus plant (c) An annual savings of **\$15M** in inventory, and a **30%** increase in service level for the switching and access plant

2. Systems Architect, Consultant and Systems Engineer in Demand forecast management area:

The above project resulted in an annual savings of **\$4M** and resulted in a **15-fold** improvement in the speed of the demand estimation process.

*(II) Systems Engineer on the ADVance Configurator Planning project (1 year):*

*(III) Systems Engineer on the Maintenance Optimization Scheduler project for Sprint (4 months)*

*(IV) Network Planner & Systems Engineer on various Network Planning projects (2.5 years):*

1. Network Planner and Team member in developing CityCom Planning Platform
2. Network Planner of Broadband Wireless Networks
3. Network Architecture Planner for Converged Voice & Data solution for DSL

Work from the above **resulted in tens of millions of dollars of savings** to the customers. In addition, the project resulted in several team based awards, as well as United States patents.

*(V) Tool Engineering for Financial Planning of Circuit to Packet Evolution (4 months)*

### **Work Experience at IBM, T.J. Watson Research Center, NY (May-Oct, 1994):**

Summer Intern (*6 months*) in the Operations Research & Manufacturing Management Center. Developed an asynchronous architecture solution for a complex constrained steel scheduling problem.

**Work Experience in India:** *2 years experience in Process Automation and Control.*

**Ph.D. Thesis** “Integration of Lot-sizing, Scheduling and Control Decisions” December 1996.  
Graduate School of Industrial Administration, Carnegie Mellon University,  
Pittsburgh, PA, U.S.A

**Ph.D. Thesis Advisors** Prof. Norman M. Sadeh (Primary), Prof. Uday S. Rao (Secondary)

**References:**

Prof. Norman M. Sadeh (Full Professor, School of Computer Science, Carnegie Mellon University., [sadeh@cs.cmu.edu](mailto:sadeh@cs.cmu.edu))

Prof. Uday S. Rao (Full Professor, College of Business, University of Cincinnati; [uday.rao@uc.edu](mailto:uday.rao@uc.edu)),

Prof. Laoucine Kerbache (Full Professor, Department of Logistics, HEC School of Management, Paris., [kerbache@hec.fr](mailto:kerbache@hec.fr))

**Academic Genealogy:**

Prof. Herbert Simon->Prof. Mark Fox->Prof. Norman Sadeh->Prof. Ramesh Bollapragada  
**(Nobel Prize winner)** (Ph.D. Thesis Advisor)

Prof. George Dantzig->Prof. Peter Jackson->Prof. Uday Rao->Prof. Ramesh Bollapragada  
**(Nobel Prize winner)** (Ph.D. Thesis Advisor)