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Hayriye Ayhan
Professor
H. Milton School of Industrial and Systems Engineering

I. Earned Degrees

Ph.D. Texas A&M University, Industrial Engineering, 1995
M.S. Texas A&M University, Industrial Engineering, 1992
B.S. Boğaziçi University, Industrial Engineering, 1991

II. Employment History

Professor of ISyE July 2010-present
Associate Professor of ISyE August 2002-June 2010
Assistant Professor of ISyE September 1995-August 2002
Visiting Researcher I.N.R.I.A, Sophia–Antipolis, August 1997-December 1997

III. Honors and Awards

A. International or National Awards

National Science Foundation CAREER Award

B. Institute or School Awards

- Selected to attend the WELI Leadership Workshop, 2005
- Alpha Pi Mu Most Approachable Professor Award, 2005
- CETL, Thank A Teacher Award, Spring 2009, Spring 2010, Spring 2011, Fall 2011, Fall 2012, Spring 2013, Fall 2013, Spring 2014, Spring 2015, Fall 2015, Fall 2018, Fall 2019, Fall 2020, Spring 2023, Fall 2023, Spring 2024
- Hesburgh Award Teaching Fellow, Fall 2020, Fall 2021
- CIOs Honor Roll **Spring 2025, Summer 2025**

IV. Research, Scholarship, and Creative Activities

Except my Ph.D. work in mid 1990's all of my research was conducted at GT.

A. Published Books, Book Chapters, and Edited Volumes

Provide a numbered list of all books or parts of books published. Include only those accepted or in-press and indicate their status.

1. **Books**
2. **Refereed Book Chapters**
3. **Edited Volumes**

B. Refereed Publications and Submitted Articles

1. Published and Accepted Journal Articles

- S. Andradóttir and H. Ayhan, “Optimal Server Control with Two Customer Classes and Classification Errors,” to appear, *European Journal of Operational Research*, **submitted and accepted in 2025**.
- X. Wang, S. Andradóttir, and H. Ayhan, “Optimal Pricing and Information Sharing in Queueing Systems,” to appear, *Queueing Systems*, **accepted in 2025**.
- J. Hu, S. Andradóttir, and H. Ayhan, “Optimal Control of Queueing Systems with Error-prone Servers,” *Stochastic Systems*, **2025**, 15, 220–251.
- R. Wu and H. Ayhan, “Optimal Admission Control in Queues with Multiple Customer Classes and Abandonments,” *Queueing Systems*, **2025**, 109, 1–33.
- G. P. Ilieva and H. Ayhan, “Optimal Control of Queues with Demand-Driven Discharge,” *Operations Research Letters*, **2025**, 59, 107220 (published online).
- H. Ayhan and T. Işık, “Operations Research: Methods and Applications–Queueing”, *Journal of the Operational Research Society*, 2024, 75, 423–617.
- Z. Yu, S. Andradóttir, and H. Ayhan “Optimal Control of Supervisors Balancing Individual and Joint Responsibilities,” *Probability in Engineering and Information Sciences*, 2023, 1, 1–20.
- S. Andradóttir and H. Ayhan, “Optimal Server Assignment in Queues with Flexible Servers and Abandonments,” *Stochastic Systems*, 2023, 13, 360–376.
- H. Ayhan, “Server Assignment Policies in Queues with Customer Abandonments”, *Queueing Systems*, 2022, 100, 393–395.
- H. Ayhan, “Optimal Admission Control Policies in Queues with Abandonments”, *Operations Research Letters*, 2022, 50, 712–718.

- S. Andradóttir, H. Ayhan and D. G. Down “Synchronous Resource Allocation: Modeling, Capacity, and Optimization”, *OR Spectrum*, 2022, 1287–1310.
- T. Işık, S. Andradóttir, and H. Ayhan “Dynamic Control of Non-Collaborative Workers When Reassignment Is Costly”, *Production Operations Management*, 2022, 31, 1332–1352.
- J. Hu, S. Andradóttir, and H. Ayhan “Server Coordination in Queueing Systems: When and How?”, *Probability in Engineering and Information Sciences*, 2022, 36, 868–922.
- S. Andradóttir and H. Ayhan “Optimizing the Interaction between Residents and Attending Physicians”, *European Journal of Operational Research*, 2021, 290, 210–218.
- D. F. Silva, B. Zhang, and H. Ayhan “Optimal Strategies for Managing Complex Authentication Systems”, *Annals of Operations Research*, 2020, 293, 317–342.
- S. Andradóttir, H. Ayhan, and D.G. Down “Ranking Flexibility Structures in Queueing Systems”, *European Journal of Operational Research*, 2020, 281, 77–86.
- X. Wang, S. Andradóttir, H. Ayhan, and T. Suk “Revenue Maximization in Two-Station Tandem Queueing Systems”, *Naval Research Logistics*, 2020, 67, 77–107.
- X. Wang, S. Andradóttir, and H. Ayhan “Optimal Pricing for Tandem Queues with Finite Buffers” *Queueing Systems*, 2019, 92, 323–396.
- D. F. Silva, B. Zhang, and H. Ayhan “Admission Control Strategies for Tandem Markovian Loss Systems”, *Queueing Systems*, 2018, 90, 35–63.
- S. Andradóttir, H. Ayhan and D. G. Down “Pooling in the Presence of Failures: Efficiency versus Risk”, *European Journal of Operational Research* (2017), 256, 230–241.
- T. Işık, S. Andradóttir, and H. Ayhan “Optimal Control of Queueing Systems with Non-collaborating Servers”, *Queueing Systems* (2016), 84, 79–110.
- Kim, J-K. and H. Ayhan, “Cyclic Queueing Networks with Subexponential Service Times and Finite Buffers”, *IEEE Transactions on Automatic Control* (2015), 60(10), 2756–2761.
- X. Wang, S. Andradóttir, and H. Ayhan, “Dynamic Server Assignment with Task-Dependent Server Synergy”, *IEEE Transactions on Automatic Control* (2015), 60(2), 570–575.
- H. Eser Kırkızlar, S. Andradóttir, and H. Ayhan, “Profit Maximization in Flexible Serial Queueing Networks”, *Queueing Systems* (2014), 77, 427–464.

- D. Silva, B. Zhang, and H. Ayhan, "Optimal Admission Control for Tandem Loss Systems with Two Stations", *OR Letters*, (2013), 41, 351–356.
- S. Andradóttir, H. Ayhan and D. G. Down, "Design Principles for Flexible Systems", *Production and Operations Management Journal* (2013), 22, 1144–1156.
- S. Andradóttir, H. Ayhan and D. G. Down, "Optimal Assignment of Servers to Tasks when Collaboration is Inefficient", *Queueing Systems* (2013), 75, 79–110.
- B. Zhang and H. Ayhan, "Control for Tandem Queues with Loss," *IEEE Transactions on Automatic Control* 58, (2013), 163–167.
- H. Eser Kırkızlar, S. Andradóttir, and H. Ayhan , "Flexible Servers in Understaffed Tandem Lines", *Production and Operations Management*, (2012), 21, 761–777.
- S. Andradóttir, H. Ayhan, and H. Eser Kırkızlar, , "Flexible Servers in Tandem Lines with Setups", *Queueing Systems* 70, (2011), 165–186.
- S. Andradóttir, H. Ayhan and D. G. Down, "Queueing Systems with Synergistic Servers," *Operations Research*, 59, (2011) 772–780.
- H. Eser Kırkızlar, S. Andradóttir, and H. Ayhan, "Robustness of Efficient Server Assignment Policies to Service Time Distributions in Finite-Buffered Lines," *Naval Research Logistics*, 57, (2010), 563–582.
- Kim, J-K. and H. Ayhan, "Tandem Queues with Subexponential Service Times and Finite Buffers", *Queueing Systems*, 66, (2010), 195–209.
- I. Maoui, H. Ayhan and R. D. Foley, "Optimal Static Pricing for a Service Facility with Holding Costs," *European Journal of Operational Research*, 197, (2009), 912–923.
- T. Aktaran-Kalaycı and H. Ayhan, "Sensitivity of Optimal Prices to System Parameters in a Service Facility," *European Journal of Operational Research*, 193, (2009), 120–128.
- S. Ziya, H. Ayhan and R. D. Foley, "Optimal Pricing for Finite Capacity Queueing Systems with Multiple Customer Classes," *Naval Research Logistics*, 55, (2008), 412–418.
- S. Andradóttir, H. Ayhan and D. G. Down, "Maximizing the Throughput of Tandem Lines with Flexible Failure Prone Servers and Finite Buffers," *Probability in Engineering and Informational Sciences*, 22, (2008), 191–211.
- S. Andradóttir, H. Ayhan and D. G. Down, "Compensating for Failures with Flexible Servers," *Operations Research*, 55, (2007), 753–768.

- S. Andradóttir, H. Ayhan and D. G. Down, "Dynamic Assignment of Dedicated and Flexible Servers in Tandem Lines," *Probability in Engineering and Informational Sciences*, 21, (2007), 497–538.
- H. Ayhan and J-K. Kim, "A General Class of Closed Fork and Join Queues with Subexponential Service Times," *Stochastic Models*, 23, (2007), 523–535.
- I. Maoui, H. Ayhan and R. D. Foley, "Congestion Dependent Pricing in a Stochastic Service System," *Advances in Applied Probability*, 39, (2007), 898–921.
- S. Ziya, H. Ayhan, R. D. Foley, and E. Peköz "A monotonicity result for the blocking probability in a G/GI/c/m queueing system," *Journal of Applied Probability*, 43, (2006), 1201–1205.
- S. Ziya, H. Ayhan and R. D. Foley, "Optimal Prices for Finite Capacity Queueing Systems," *Operations Research Letters*, 34, (2006) 214–218.
- S. Andradóttir and H. Ayhan, "Throughput Maximization for Tandem Lines with Two Stations and Flexible Servers," *Operations Research*, 53, (2005) 516–531.
- H. Ayhan. Z. Palmowski and S. Schelegel, "Cyclic Queueing Networks with Subexponential Service Times," *Journal of Applied Probability*, 41, (2004), 791–801.
- S. Ziya, H. Ayhan and R. D. Foley, "Relationships Among Three Assumptions in Revenue Management," *Operations Research*, 52, (2004), 804–809.
- J. Chang, H. Ayhan, J.G. Dai and C.H.Xia, "Dynamic Scheduling of a Multiclass Fluid Model with Transient Overload," *Queueing Systems: Theory and Applications*, 48, (2004), 263–307.
- A.F. de Kort, B. Heidergott and H. Ayhan "A Probabilistic (max,+) Approach for Determining Railway Infrastructure Capacity," *European Journal of Operational Research*, 148, (2003), 644–651.
- S. Andradóttir, H. Ayhan and D. G. Down, "Dynamic Server Allocation for Queueing Networks with Flexible Servers," *Operations Research*, 51, (2003), 952–968.
- M. Lewis, H. Ayhan and R.D. Foley "Optimal Admission Policies for a Multi-Class Non-Stationary Queueing System," *Journal of Applied Probability*, 39, (2002), 20–37.
- H. Ayhan and D-W. Seo "Tail Probability of Transient and Stationary Waiting Times in (max,+)-Linear Systems," *IEEE Transactions on Automatic Control* 47, 1, (2002), 151–158.
- S. Andradóttir, H. Ayhan and D. G. Down "Server Assignment Policies for Maximizing the Steady-State Throughput of Finite Queueing Systems," *Management Science*, 47, 10, (2001), 1421–1439.

- H. Arslan, H. Ayhan and T.L. Olsen “Analytic Models for When and How to Expedite in Make-To-Order Systems,” *IIE Transactions*, 33, (2001), 1019–1029.
- H. Ayhan and D-W. Seo, “Laplace Transform and Moments of Waiting Times in $(\max,+)$ -Linear Systems with Poisson Input,” *Queueing Systems: Theory and Applications*, 37, 4, (2001), 405-438.
- H. Ayhan and S. Schlegel “Expansion Formulae for Characteristics of Cumulative Cost in Finite Horizon Production Models,” *European Journal of Operational Research*, 132, 1, (2001), 50-61.
- H. Ayhan and F. Baccelli, “Expansions for Joint Laplace Transform of Stationary Waiting Times in $(\max,+)$ -Linear Systems with Poisson Input,” *Queueing Systems: Theory and Applications*, 37, 1–3, (2001), 291-328.
- H. Ayhan and T.L. Olsen “Scheduling of a Multi-Class Single Server Queue Under Non-Traditional Performance Measures,” *Operations Research*, 48, (2000), 482-489.
- H. Ayhan, J. Limon-Robles and M.A. Wortman “On the Time-Dependent Occupancy and Backlog Distributions for the $GI/G/\infty$ Queue,” *Journal of Applied Probability*, 36, (1999), 558-569.
- M. Lewis, H. Ayhan and R.D. Foley “Bias Optimality in a Queue with Admission Control,” *Probability in Engineering and Information Sciences*, 13, (1999), 309-327.
- H. Ayhan and M. A. Wortman, “Job Flow Control in Assembly Operations,” *IEEE Transactions on Automatic Control*, 44, (1999), 864-868.
- H. Ayhan, J. Limon-Robles and M. A. Wortman “An Approach for Computing Tight Numerical Bounds on Renewal Functions,” *IEEE Transactions on Reliability*, 48, (1999), 182-188.
- H. Ayhan and M. A. Wortman, “An Approximation for Computing the Throughput of Closed Assembly-Type Queueing Networks,” *European Journal of Operational Research*, 112, (1998), 107-121.
- G.-A. Klutke, M.A. Wortman and H. Ayhan “The Availability of Inspected Systems Subject to Random Deterioration,” *Probability in Engineering and Information Sciences*, 10, (1996), 109-118.
- M.A. Wortman, G.-A. Klutke and H. Ayhan “A Maintenance Strategy for Systems Subject to Deterioration Governed by Random Shocks,” *IEEE Transactions on Reliability*, 43, (1994), 439-445.

2. Conference Presentation with Proceedings (Refereed)

- D. F. Silva, B. Zhang, and H. Ayhan “Dynamic control of complex authentication systems”, *Proceedings of the 2016 IEEE 55th Conference on Decision & Control (CDC)*, (2016), 1996–2003.

- J. Chang, H. Ayhan, J.G. Dai, Z. Liu, M. S. Squillante and C.H. Xia “Optimal dynamic scheduling in a multiclass fluid model of Internet servers with transient overload,” *Proceedings of the 2003 IEEE Conference on Decision & Control*, 721–727.
- H. Ayhan and D-W. Seo, “Characteristics of Transient and Stationary Waiting Times in Poisson Driven (max, +) Linear Systems,” *Proceedings of the IFAC Symposium on System Structure and Control*, 2001, 227–234.

3. Other Refereed Material

- H. Ayhan, “Sojourn Time Control for Assembly Type Queueing Networks,” National Science Foundation Design & Manufacturing Grantees Conference Proceedings, January 1999.
- H. Ayhan, “Expansion Formulae for Characteristics of Cumulative Cost in Finite Horizon Production Models,” National Science Foundation Design & Manufacturing Grantees Conference Proceedings, January 2000.
- H. Ayhan, “Transient and Stationary Waiting Times in a Class of Queueing Networks,” National Science Foundation Design & Manufacturing Grantees Conference Proceedings, January 2001.
- S. Andradóttir, H. Ayhan and D. G. Down “Maximizing the Throughput of Finite Queues in Tandem Using Cross-Trained Servers,” National Science Foundation Design & Manufacturing Grantees Conference Proceedings, January 2001.
- H. Ayhan, “Tail Probability of Transient and Stationary Waiting Times in a Class of Queueing Networks,” National Science Foundation Design & Manufacturing Grantees Conference Proceedings, January 2002.
- H. Ayhan, “Asymptotics of Closed Queueing Networks with Subexponential Service Times,” National Science Foundation Design & Manufacturing Grantees Conference Proceedings, January 2003.
- H. Ayhan, “Asymptotics of Closed Fork and Join Queues with Subexponential Service Times,” National Science Foundation Design & Manufacturing Grantees Conference Proceedings, January 2004.
- H. Ayhan, “Dynamic Scheduling of a Multiclass Fluid Model with Transient Overload,” National Science Foundation Design & Manufacturing Grantees Conference Proceedings, January 2005.
- H. Ayhan and J-K. Kim, “Tandem Queues with Subexponential Service Times and Finite Buffers,” National Science Foundation Design & Manufacturing Grantees Conference Proceedings, January 2011.
- S. Andradóttir, H. Ayhan, and D. G. Down, “Effective Flexibility Structures for Production and Service Systems,” National Science

Foundation Design & Manufacturing Grantees Conference Proceedings, January 2011.

4. Submitted Journal Articles (with Date of Submission)

- R. Wu and H. Ayhan, "Service Rate Control in Queues with Abandonments," under review, submitted in 2025.
- I. Grosof and H. Ayhan, "Multiserver-job Response Time under Multilevel Scaling," under revision, submitted in 2025.
- S. Andradóttir and H. Ayhan, "Optimal Resident Physician Supervision when Patient Care is Non-preemptive," under revision, revised in 2025.

C. Other Publications and Creative Products

D. Presentations

Provide a numbered list of all conference presentations (separate keynote and invited from submitted), invited seminars, scholarly presentations, etc. (Do not list a presentation here, if it is listed elsewhere.)

1. Invited Conference and Workshop Presentations

- H. Ayhan* and M.A. Wortman, "Real Time Job Flow Control in Assembly Operations," INFORMS National Meeting, Atlanta, November, 1996.
- H. Ayhan*, "Scheduling Maintenance Activities in a Single Server Queue," INFORMS National Meeting, San Diego, May 1997.
- H. Ayhan* and M.A. Wortman, "An Approximation for Computing the Throughput of Closed Assembly-Type Queueing Networks," INFORMS National Meeting, Montreal, April 1998.
- H. Ayhan* and F. Baccelli, "Expansions for Joint Laplace Transform of Stationary Waiting Times in $(\max,+)$ -Linear Systems with Poisson Input," INFORMS National Meeting, Seattle, October 1998.
- H. Ayhan*, J. Limon-Robles and M. A. Wortman "An Approach for Computing Tight Numerical Bounds on Renewal Functions," INFORMS National Meeting, Cincinnati, May 1999.
- H. Ayhan* and F. Baccelli, "Expansions for Joint Laplace Transform of Stationary Waiting Times in $(\max,+)$ -Linear Systems with Poisson Input," INFORMS Applied Probability Conference, Ulm, Germany, July 1999.
- H. Ayhan* and F. Baccelli, "Expansions for Joint Laplace Transform of Stationary Waiting Times in $(\max,+)$ -Linear Systems with Poisson Input," ALAPEDES, $(\max,+)$ algebra workshop, Delft, the Netherlands, October 1999.

- H. Ayhan* and D-W. Seo, "Laplace Transform and Moments of Waiting Times in Poisson Driven (max,+)-Linear Systems," INFORMS National Meeting, Philadelphia, November 1999.
- S. Andradóttir, H. Ayhan and D. G. Down* "Server Assignment Policies for Maximizing the Steady-State Throughput of Finite Queueing Systems," INFORMS National Meeting, Salt Lake City, May 2000.
- S. Andradóttir, H. Ayhan and D. G. Down* "Server Assignment Policies for Maximizing the Steady-State Throughput of Finite Queueing Systems," CanQue 2000, London, Ontario, May 2000.
- H. Ayhan* and D-W. Seo, "Tail Probability of Transient and Stationary Waiting Times in Poisson Driven (max,+)-Linear Systems," INFORMS National Meeting, San Antonio, November 2000.
- S. Andradóttir, H. Ayhan* and D. G. Down "Server Assignment Policies for Maximizing the Steady-State Throughput of Finite Queueing Systems," INFORMS Applied Probability Conference, New York, July 2001.
- S. Andradóttir*, H. Ayhan and D. G. Down "Dynamic Server Allocation for Queueing Networks with Flexible Servers," INFORMS National Meeting, Miami, November 2001.
- H. Ayhan* Z. Palmowski and S. Schelegel, "Cyclic Queueing Networks with Subexponential Service Times," IFORS, July 2002, Edinburgh and INFORMS National Meeting, San Jose, November 2002.
- S. Andradóttir* and H. Ayhan* "Throughput Maximization for Tandem Lines with Two Stations and Flexible Servers," CORS National Meeting, Vancouver, June 2003 and INFORMS National Meeting, Atlanta, October 2003.
- S. Andradóttir, H. Ayhan and D. G. Down* "Scheduling Failure Prone Networks," INFORMS National Meeting, Atlanta, October 2003.
- S. Andradóttir, H. Ayhan* and D. G. Down "Throughput Maximization in Tandem Lines with Dedicated and Shared Servers," INFORMS National Meeting, Atlanta, October 2003.
- S. Ziya*, H. Ayhan and R. D. Foley, "Precision Pricing for a Service Facility," INFORMS National Meeting, Atlanta, October 2003.
- J. Chang*, H. Ayhan and J.G. Dai "Dynamic Scheduling of a Multi-class Open Network in a Slowly Changing Environment," INFORMS National Meeting, Atlanta, October 2003.
- H. Ayhan* "Asymptotics of Closed Fork and Join Queues with Subexponential Service Times," INFORMS National Meeting, Denver, October 2004.
- S. Andradóttir, H. Ayhan and D. G. Down* "Compensating for Failures with Flexible Servers," INFORMS National Meeting, Denver, October 2004.

- S. Andradóttir, H. Ayhan and D. G. Down* "Dynamic Assignment of Dedicated and Flexible Servers in Tandem Lines," INFORMS Applied Probability Meeting, Ottawa, July 2005.
- S. Andradóttir, H. Ayhan and D. G. Down* "Evaluating Robustness of Networks with Flexible Servers," INFORMS National Meeting, San Francisco, November 2005.
- S. Andradóttir, H. Ayhan* and D. G. Down "Dynamic Assignment of Dedicated and Flexible Servers in Tandem Lines," INFORMS National Meeting, San Francisco, November 2005.
- S. Andradóttir, H. Ayhan* and D. G. Down "Throughput Maximization in Tandem Lines with Flexible Failure-Prone Servers," INFORMS National Meeting, San Francisco, November 2005.
- S. Andradóttir, H. Ayhan* and D. G. Down "Lines with Collaborative Flexible Servers," INFORMS National Meeting, Pittsburgh, November 2006.
- S. Andradóttir, H. Ayhan* and D. G. Down "Queueing Systems with Synergistic Servers," INFORMS Applied Probability Society Meeting, Eindhoven, July 2007.
- H. Eser Kırkızlar*, S. Andradóttir, and H. Ayhan "Flexible Servers in Tandem Lines with Fewer Servers Than Stations," INFORMS National Meeting, Seattle, November 2007.
- H. Eser Kırkızlar*, S. Andradóttir, and H. Ayhan "Insensitivity of Effective Server Assignment Policies to Service Time Distributions," INFORMS National Meeting, Seattle, November 2007.
- H. Ayhan* and J-K. Kim, "A General Class of Closed Fork and Join Queues with Subexponential Service Times," INFORMS National Meeting, Seattle, November 2007.
- S. Andradóttir, H. Ayhan*, and D. G. Down "Queues with Collaborative Flexible Servers," INFORMS National Meeting, Washington DC, October 2008.
- S. Andradóttir, H. Ayhan, and D. G. Down* "The Variability Adjusted Flexibility Index for Flexible Queueing Systems," INFORMS National Meeting, Washington DC, October 2008.
- H. Eser Kırkızlar*, S. Andradóttir, and H. Ayhan "Flexible Servers in Tandem Lines with Setups," INFORMS National Meeting, Washington DC, October 2008.
- H. Eser Kırkızlar*, S. Andradóttir, and H. Ayhan "Dynamic Server Assignment in the Presence of Setup Costs," INFORMS Applied Probability Society Meeting, Ithaca, July 2009.
- H. Ayhan* and J-K. Kim, "Tandem Queues with Blocking and Subexponential Service Times," INFORMS Applied Probability Society Meeting, Ithaca, July 2009.

- H. Eser Kırkızlar*, S. Andradóttir, and H. Ayhan “Service Quality vs. Efficiency in Tandem Systems,” INFORMS National Meeting, San Diego, October 2009.
- J-K. Kim* and H. Ayhan “Cyclic Queueing Networks with Subexponential Service Times and Finite Buffers,” INFORMS National Meeting, San Diego, October 2009.
- B. Zhang* and H. Ayhan “Optimal Admission Control for Tandem Queues with Loss,” INFORMS National Meeting, San Diego, October 2009.
- S. Andradóttir, H. Ayhan*, and D. G. Down “Pooling Failure-prone Servers: A Cautionary Tale,” INFORMS National Meeting, Austin, November 2010.
- B. Zhang* and H. Ayhan “Optimal Admission Control for Tandem Queues with Loss,” INFORMS National Meeting, Austin, November 2010.
- B. Zhang and H. Ayhan* “Optimal Admission Control for Tandem Queues with Loss,” INFORMS Applied Probability Society Meeting, Stockholm, Sweden, July 2011.
- T. Işık*, S. Andradóttir, and H. Ayhan “Tandem Lines with Non-collaborative Servers,” INFORMS National Meeting, Charlotte, November 2011.
- T. Işık*, S. Andradóttir, and H. Ayhan “Non-collaborative Systems with Set-up Costs,” INFORMS National Meeting, Phoenix, October 2012.
- D. F. Silva*, B. Zhang and H. Ayhan “Optimal Admission Control Policies for Two Station Tandem Queues with Loss,” INFORMS National Meeting, Phoenix, October 2012.
- X. Wang*, S. Andradóttir, and H. Ayhan “Throughput Maximization for Tandem Queues with Synergistic Servers,” INFORMS National Meeting, Phoenix, October 2012.
- D. F. Silva, B. Zhang and H. Ayhan* “Optimal Admission Control for Tandem Loss Systems,” INFORMS Applied Probability Society Meeting, San Jose, Costa Rica, July 2013.
- X. Wang, S. Andradóttir*, and H. Ayhan “Optimal Dynamic Pricing for Tandem Queueing Systems,” INFORMS National Meeting, Minneapolis, October 2013.
- T. Işık*, S. Andradóttir, and H. Ayhan “Tandem Queues with Non-collaborative Flexible Servers and Set-up Costs,” INFORMS National Meeting, Minneapolis, October 2013.
- D. F. Silva*, B. Zhang and H. Ayhan “Optimal Access Control Policies in Systems of Two Tandem Queues with Loss,” INFORMS National Meeting, Minneapolis, October 2013.

- X. Wang*, S. Andradóttir, and H. Ayhan “Optimal Pricing in Tandem Queueing Systems with Finite Buffers,” INFORMS National Meeting, San Francisco, November 2014.
- T. Işık*, S. Andradóttir, and H. Ayhan “Processor Sharing in Non-Collaborative Queueing Networks,” INFORMS National Meeting, San Francisco, November 2014.
- D. F. Silva*, B. Zhang and H. Ayhan “Optimal Admission Control for Markovian Loss Systems of Two Stations,” INFORMS National Meeting, San Francisco, November 2014.
- S. Andradóttir, and H. Ayhan* “Optimizing the Interaction Between Attending Physicians and Residents,” INFORMS Applied Probability Society Meeting, Istanbul, Turkey, July 2015.
- D. F. Silva*, B. Zhang and H. Ayhan “Optimal Admission Control for Markovian Tandem Loss Systems,” INFORMS Applied Probability Society Meeting, Istanbul, Turkey, July 2015.
- T. Işık*, S. Andradóttir, and H. Ayhan “Maximizing Throughput in Non-collaborative Networks of Queues,” INFORMS National Meeting, Philadelphia, November 2015.
- D. F. Silva*, B. Zhang and H. Ayhan “Optimal Assignment of Authentication Servers to Different Customer Classes,” INFORMS National Meeting, Philadelphia, November 2015.
- D. F. Silva*, B. Zhang and H. Ayhan “Optimal Assignment of Authentication Servers to Different Customer Classes,” INFORMS Applied Probability Society Meeting, Evanston, 2017.
- J. Hu*, S. Andradóttir, and H. Ayhan “Dynamic Control of Service Systems with Teams,” INFORMS National Meeting, Houston, October 2017.
- S. Andradóttir, and H. Ayhan* “Optimizing the Interaction between Residents and Attending Physicians” INFORMS National Meeting, Houston, October 2017.
- J. Hu*, S. Andradóttir, and H. Ayhan “Server Collaboration in Queueing Systems: When and How?” INFORMS National Meeting, Phoenix, November 2018.
- X. Wang*, S. Andradóttir, and H. Ayhan “Optimal Pricing for Tandem Queues with Finite Buffers” INFORMS National Meeting, Phoenix, November 2018.
- J. Hu*, S. Andradóttir, and H. Ayhan “Optimal Control of Queueing Systems With Defects?” INFORMS National Meeting, Seattle, November 2019.
- X. Wang*, S. Andradóttir, and H. Ayhan “Revenue Maximization in Two-Station Tandem Queueing Systems” INFORMS National Meeting, Seattle, November 2019.

- X. Wang*, S. Andradóttir, and H. Ayhan “Revenue Management In Queueing Systems With Price And Congestion Sensitive Customers” INFORMS National Meeting, Anaheim, October 2021.
- X. Wang*, S. Andradóttir, and H. Ayhan “Optimal Pricing and Information Sharing in Queueing Systems” IDSI Annual Conference, Houston, November 2022.
- X. Wang, S. Andradóttir, and H. Ayhan* “Optimal Pricing and Information Sharing in Queueing Systems”, INFORMS Applied Probability Society Meeting, Nancy, France, June 2023.
- Z.Yu*, S. Andradóttir, and H. Ayhan “Optimal Control of Supervisors Balancing Individual and Joint Responsibilities”, INFORMS National Meeting, Phoenix, October 2023.
- R. Wu* and H. Ayhan “Optimal Admission Control in Queues with Multiple Customer Classes and Abandonments”, INFORMS National Meeting, Seattle, October 2024.
- J. Di*, S. Andradóttir, and H. Ayhan “Optimal Pricing with Impatient Customers”, INFORMS National Meeting, Seattle, October 2024.
- G. P. Ilieva* and H. Ayhan, “Optimal Control of Queues with Demand-Driven Discharge”, IISE, Atlanta, [May 2025](#).
- B. Chatterjee*, S. Andradóttir, and H. Ayhan “Dynamic Server Assignment in Queueing Systems with Synergistic Servers and Abandonments”, IISE, Atlanta, [May 2025](#).
- R. Wu* and H. Ayhan “Optimal Service Rate Control in Queues with Abandonments”, IISE, Atlanta, [May 2025](#).
- J. Di*, S. Andradóttir, and H. Ayhan “Dynamic Pricing in Queueing Systems With Customer Abandonments and Reimbursement”, IISE, Atlanta, [July 2025](#).
- B. Chatterjee*, S. Andradóttir, and H. Ayhan “Dynamic Server Assignment in Queueing Systems with Synergistic Servers and Abandonments”, INFORMS Applied Probability Society Meeting, Atlanta, [July 2025](#).
- R. Wu* and H. Ayhan “Optimal Service Rate Control in Queues with Abandonments”, INFORMS Applied Probability Society Meeting, Atlanta, [July 2025](#).
- J. Di*, S. Andradóttir, and H. Ayhan “Dynamic Pricing in Queueing Systems With Customer Abandonments and Reimbursement”, INFORMS Applied Probability Society Meeting, Atlanta, [July 2025](#).
- B. Chatterjee*, S. Andradóttir, and H. Ayhan “Dynamic Server Assignment in Queueing Systems with Synergistic Servers and Abandonments”, INFORMS Annual Meeting, Atlanta, [October 2025](#).

- R. Wu* and H. Ayhan “Optimal Service Rate Control in Queues with Abandonments”, INFORMS Annual Meeting, Atlanta, **July 2025**.
- J. Di*, S. Andradóttir, and H. Ayhan “Dynamic Pricing in Queueing Systems With Customer Abandonments and Reimbursement”, INFORMS Annual Meeting, Atlanta, **July 2025**.
- S. Andradóttir, H. Ayhan, and M.E. Lewis* “Control of Queues,” INFORMS Annual Meeting, Atlanta, **July 2025**.

2. Conference and Workshop Presentations

- H. Ayhan*, G.-A. Klutke and M.A. Wortman, “A Maintenance Strategy for Systems Subjected to Deterioration Governed by Random Shocks,” ORSA/TIMS Joint National Meeting, Phoenix, October 1993.
- H. Ayhan* and M.A. Wortman, “Throughput for CONWIP Controlled Assembly Operations,” INFORMS National Meeting, New Orleans, October, 1995.
- H. Ayhan* and M.A. Wortman, “Real Time Job Flow Control in Assembly Operations,” INFORMS National Meeting, Washington D.C., May, 1996.
- H. Ayhan*, J. Limon-Robles and M. A. Wortman “On the Time-Dependent Occupancy and Backlog Distributions for the $GI/G/\infty$ Queue,” INFORMS Applied Probability Meeting, Boston, July 1997.
- M. Lewis*, H. Ayhan and R.D. Foley “Optimal Admission Policies for a Multi-Class Non-Stationary Queueing System,” CanQue 2000, London, Ontario, May 2000.
- H. Ayhan* and D-W. Seo, “Laplace Transform and Moments of Waiting Times in Poisson Driven (max,+)-Linear Systems,” Stochastic Networks Conference, Madison, June 2000.
- S. Andradóttir, H. Ayhan and D. G. Down* “Server Assignment Policies for Maximizing the Steady-State Throughput of Finite Queueing Systems,” International Conference on Operations Research in Development, Kruger National Park, South Africa, May 2001.
- H. Ayhan* and D-W. Seo, “Characteristics of Transient and Stationary Waiting Times in Poisson Driven (max, +) Linear Systems,” Workshop on Max-Plus Algebras, Prague, Czech Republic, August 2001.
- T. Aktaran-Kalaycı* and H. Ayhan “Sensitivity of Optimal Prices for an $M/M/s/K$ Service System,” INFORMS National Meeting, San Francisco, November 2005.
- I. Maoui*, H. Ayhan, and R.D. Foley “Optimal Pricing for a Service Facility with Holding Costs,” INFORMS National Meeting, San Francisco, November 2005.
- H. Eser Kırkızlar*, S. Andradóttir, and H. Ayhan “Flexible Servers in Non-Markovian Lines with Finite Buffers,” INFORMS National Meeting, Pittsburgh, November 2006.

3. Invited Seminar Presentations

- University of Illinois, Chicago, 1995
- I.N.R.I.A., Sophia–Antipolis, France 1997
- University of Ulm, Germany, 1997
- University of Michigan, Ann Arbor, 1998
- École Normale Supérieure, Paris, France, 1999
- Texas A&M University, 2001
- Koç University, Turkey, 2005
- University of Michigan, Ann Arbor, 2006
- “A Tutorial on Stochastic Models in OR”, YA/EM Conference, Ankara, Turkey, 2009
- University of Miami, 2009
- Ohio State University, 2010
- Carnegie Mellon University, 2012
- Cornell University, 2012
- University of Tennessee, Knoxville, 2013
- National University of Singapore, 2013
- Singapore Management University, 2013
- University of California, Berkeley, 2015
- Texas A&M University, 2016
- University of Wisconsin, Madison, Fall 2018
- University of Minnesota, Fall 2020

E. Grants and Contracts

1. As Principal Investigator

- Title of Project: Sojourn Time Control in Assembly-Type Queueing Networks
Agency/Company: National Science Foundation
Total Dollar Amount: \$108,894
Role: PI
Period of Contract: 9/1/1997 – 8/31/2000
Candidate’s Share: ~100%
- Title of Project: Collaborative Research: Admission Control and Pricing in Non-stationary Queueing Systems
Agency/Company: National Science Foundation
Total Dollar Amount: \$224,153

Role: PI

Collaborators: Robert D. Foley (co-PI) and Mark Lewis (PI collaborative research)

Period of Contract: 9/1/1999 – 8/31/2003

Candidate's Share: ~50%

- Title of Project: Approximations and Bounds for Stationary and Transient Characteristics of a Class of Queueing Networks, CAREER
Agency/Company: National Science Foundation

Total Dollar Amount: \$200,000

Role: PI

Period of Contract: 05/01/200–03/31/2006

Candidate's Share: ~100%

- Title of Project: Performance Analysis of Closed Queueing Networks with Subexponential Processing Times

Agency/Company: National Science Foundation

Total Dollar Amount: \$153,197

Role: PI

Period of Contract: 07/01/ 2010–06/31/2014

Candidate's Share: ~100%

2. As Co-Principal Investigator

- Title of Project: Distribution System Equipment Reliability Centered Maintenance Program Model

Agency/Company: NEETRAC

Total Dollar Amount: \$46,500

Role: Co-PI

Collaborators: Anton Kleywegt

Period of Contract: 04/04/1998–03/31/2000

Candidate's Share: ~50%

- Urban Freight Congestion Tool

Agency/Company: FHWA

Total Dollar Amount: \$193,000

Role: Co-PI

Collaborators: Alan Erera and Chip White

Period of Contract: 01/01/ 2007–12/31/2009

Candidate's Share: ~33%

- Title of Project: Resource Flexibility for Uncertainty Mitigation in Production and Service Systems

Agency/Company: National Science Foundation

Total Dollar Amount: \$360,000.00

Role: Co-PI

Collaborators: Sigrún Andradóttir (PI) and Douglas G. Down (Contributor)

Period of Contract: 07/01/2009–06/01/2014.

Candidate's Share: ~50%

- Title of Project: Queueing Systems with Synchronization Constraints

Agency/Company: National Science Foundation

Total Dollar Amount: \$349,999

Role: Co-PI

Collaborators: Sigrún Andradóttir (PI)

Period of Contract: 08/01/ 2015–07/31/2020

Candidate's Share: ~50%

- Title of Project: Collaborative Research: Revenue Management for Multistage Service Systems with Price and Congestion Sensitive Customers

Agency/Company: National Science Foundation

Total Dollar Amount: \$340,583

Role: Co-PI

Collaborators: Sigrún Andradóttir (PI) and Xinchang Wang (PI collaborative research)

Period of Contract: 07/01/ 2022–06/31/2026

Candidate's Share: ~50%

3. As Senior Personnel or Contributor

- Title of Project: Stochastic Networks in Communications and Manufacturing

Agency/Company: National Science Foundation

Total Dollar Amount: \$30,020

Role: Contributor

Collaborators: Richard F. Serfozo (PI), Jim Dai (Contributor), Robert D. Foley (Contributor)

Period of Contract: 09/01/1999–08/31/2000

F. Other Scholarly and Creative Accomplishments

G. Societal and Policy Impacts

H. Other Professional Activities

Visiting Researcher I.N.R.I.A, Sophia–Antipolis, August 1997–December 1997

V. Education

A. Courses Taught

- Undergraduate: ISyE 2027, ISyE 3232, ISyE 4232
- Graduate: ISyE 6656, ISyE 6664, ISyE 6761, ISyE 6762

Semester, Year	Course Number	Course Title	Number of Students
Fall/25	ISyE 4232	Advanced Stochastic Systems	48
Fall/25	ISyE 6761	Stochastic Processes I	21
Fall/25	Math 6761	Stochastic Processes I	8
Summer/25	ISyE 3232	Stochastic Manufacturing & Service Systems	16
Spring/25	ISyE 4232	Advanced Stochastic Systems	31
Fall/24	ISyE 4232	Advanced Stochastic Systems	58
Fall/24	ISyE 6664	Stochastic Optimization	31
Summer/24	ISyE 4232	Advanced Stochastic Systems	30
Spring/24	ISyE 4232	Advanced Stochastic Systems	60
Fall/23	ISyE 4232	Advanced Stochastic Systems	61
Fall/23	ISyE 6656	Queueing Theory	7
Summer/23	ISyE 4232	Advanced Stochastic Systems	32
Spring/23	ISyE 4232	Advanced Stochastic Systems	60
Fall/22	ISyE 3232	Stochastic Manufacturing & Service Systems	75
Fall/22	Math 6761	Stochastic Processes I	13
Fall/22	ISyE 6761	Stochastic Processes I	24
Summer/22	ISyE 4232	Advanced Stochastic Systems	17
Spring/22	ISyE 4232	Advanced Stochastic Systems	73
Fall/21	ISyE 6664	Stochastic Optimization	27
Fall/21	ISyE 3232	Stochastic Manufacturing & Service Systems	59
Summer 21	ISyE 2027	Applications of Probability	36
Spring/21	ISyE 4232	Advanced Stochastic Systems	84

B. Individual Student Guidance

1. Ph.D. Students

a. **Graduated Ph.D. Students**

- Dr. Mark E. Lewis (co-advised with Robert D. Foley)
Current position: Professor and Chair, School of Operations Research and Industrial Engineering, Cornell University
Thesis Title: Bias Optimality in a Two Class Non Stationary

Queueing System

Graduation Date: Summer 1998

Honorable mention 1999 INFORMS Dantzig Dissertation Award,
PECASE Award

- Dr. Douglas J. Thomas (co-advised with Steven T. Hackman)
Current position: Professor, Darden School of Business, University of Virginia
Thesis Title: Committed Delivery Strategies for Supply Chain Management
Graduation Date: Summer 1999
- Dr. Dong-Won Seo
Current position: Associate Professor, College of Management and International Relations, Kyung Hee University (Korea)
Graduation Date: Summer 2002
- Dr. Serhan Ziya (co-advised with Robert D. Foley)
Current Position: Professor, Department of Statistics and Operations Research, University of North Carolina, Chapel Hill
Thesis Title: Uniform and Precision Pricing for a Service Facility
Graduation Date: Summer 2003
2008 MSOM Meritorious Service Award, 2009 POMS Emerging Scholar Award
- Dr. Junxia Chang (co-advised with Jim Dai)
Current Position: PayPal Inc., Atlanta
Project Title: Dynamic Scheduling of Open Multiclass Queueing Networks in a Slowly Changing Environment
Graduation Date: Fall 2004
- Dr. Idriss Maoui (co-advised with Robert D. Foley)
Current Position: Barclay Capitals, New York
Project Title: Optimal Pricing for a Service Facility with Congestion Penalties
Graduation Date: Spring 2006
- Dr. Tuba Aktaran-Kalaycı (co-advised with David Goldsman and James R. Wilson)
Current Position: Predictix, Atlanta
Project Title: Steady State Analyses: Variance Estimation in Simulations and Dynamic Pricing in Service Systems
Graduation Date: August 2006
- Dr. Eser Kirkizlar (co-advised with Sigrún Andradóttir)
Current Position: Statistician, Natere Inc., San Carlos, CA
Project Title: Performance Improvements Through Flexible Workforce
Graduation Date: Fall 2008
- Dr. Jung-Kyung Kim
Current Position: Samsung Corporation, Korea.

Project Title: Tail Asymptotics of Queueing Networks with Subexponential Service Times

Graduation Date: Summer 2009

- Dr. Tuğçe Işık (co-advised with Sigrún Andradóttir)
Current Position: Assistant Professor, Department of Industrial Engineering, Clemson University
Project Title: Optimal control of queueing systems with non-collaborating servers
Graduation Date: Summer 2015
- Dr. Daniel Silva
Current Position: Assistant Professor, Department of Industrial and Systems Engineering
Project Title: Optimal Admission Control in Tandem and Parallel Queueing Systems with Applications to Computer Networks
Graduation Date: Summer 2016
- Dr. Carl Morris (co-advised with Shijie Deng)
Current Position: Amazon
Project Title: Dynamic Portfolio Optimization Using Mean-Semivariance
Graduation Date: December 2017
- Dr. Junqi Hu (co-advised with Sigrún Andradóttir)
Current Position: Lecturer, Old Dominion University, Virginia
Project Title: Scheduling in Queueing Systems with Specialized or Error-prone Servers
Graduation Date: August 2020

b. **In Process Ph.D. Students**

- Guergana Ilieva
Started advising in Fall 2021, Passed comprehensive exam in Fall 2022, Successfully defended proposal **Fall 2025**
Butler Fellow Fall 2024-Spring 2025
- Runhua Wu
Started advising in Fall 2023, Passed comprehensive exam in Fall 2024
- Jieqi Di (co-advising with Sigrún Andradóttir)
Started advising in Spring 2023, Passed comprehensive exam in Fall 2023, Successfully defended proposal **Fall 2025**
- Bihan Chattarjee (co-advising with Sigrún Andradóttir)
Started advising in Summer 2024, Passed comprehensive exam in Spring 2024

2. **M.S. Students (Indicate Thesis Option for Each Student)**

a. **Graduated M.S. Students**

- Runhua Wu (current PhD student)
Project Title: Optimal Admission Control in Queues with Abandonments

- April Zhuoting Yu
Project Title: Understanding the Interaction between Attending Physicians and Residents in the Presence of Abandonments
- Carlos Rodriguez (non-thesis)
Project Title : Transient Analysis of Queueing Systems
- Achim Rink (non-thesis)
Project Title : Scheduling Maintenance Activities in a Single Server Queue
- Jung-Kyung Kim (non-thesis)
Project Title : Closed Fork and Join Queues with Subexponential Service Times

3. Undergraduate Students

- Anna Park (Summer 2024 and Fall 2024)
PURA Award
- Alex Dulisse (Spring 2021–Fall 2021)

4. Service on Thesis or Dissertation Committees

a. Internal

- Member, Dissertation Reading Committee for Xiaotao Huang (ISyE), Summer 1996
- Member, Master Thesis Reading Committee for Woojin Chang (ISyE), Fall 1998
- Member, Proposal and Dissertation Reading Committee for Jojo Acksteiner (ISyE), Fall 2000, Summer 2001
- Member, Proposal Reading Committee for Jerome D. Coombs-Reyes (ISyE), Fall 2002 and Summer 2003
- Member, Proposal and Dissertation Reading Committee for Nilay Tanik Argon (ISyE), Fall 2002
- Member, Proposal and Dissertation Reading Committee for Pairote Balun (ISyE), Fall 2002 and Summer 2003
- Member, Proposal and Dissertation Reading Committee for Sung Seok Ko (ISyE), Fall 2002, Summer 2003
- Member, Proposal and Dissertation Reading Committee for Jaen Choi (ChemE), Fall 2002 and Fall 2004
- Member, Dissertation Reading Committee for Wichit Saiklio (ECE), Fall 2002
- Member, Dissertation Reading Committee for Jin Young Choi (ISyE), Summer 2004
- Member, Proposal and Dissertation Reading Committee for Seçil Savaşaneril (ISyE), Fall 2004

- Member, Proposal and Dissertation Reading Committee for Wuqin Lin (ISyE), Spring 2005
- Member, Dissertation Reading Committee for Qiang Le (ECE), Fall 2005
- Member, Proposal and Dissertation Reading Committee for Margarit R. Khachatryan (ISyE), Spring 2006 and Fall 2006
- Member Proposal and Dissertation Reading Committee for Brian H. Fralix (ISyE), Summer 2006, Fall 2006
- Member Proposal and Dissertation reading Committee for Rakshita Agrawal (ChemE), Fall 2006, Summer 2009
- Member Proposal and Dissertation Reading Committee for Andrei Prudius (ISyE), Spring 2007, Fall 2007
- Member Proposal and Dissertation Reading Committee for Jinpyo Lee (ISyE), Spring 2007, Spring 2008
- Member Proposal and Dissertation Reading Committee for Theologos Bountourelis (ISyE), Fall 2007, Fall 2008
- Member Proposal and Dissertation Reading Committee for Jiheng Zhang (ISyE), Fall 2008, Spring 2009
- Member Proposal and Dissertation Reading Committee for Kan Wu (ISyE), Fall 2008, Summer 2009
- Member Proposal and Dissertation Reading Committee for Frederick C. Zahrn (ISyE), Fall 2008, Summer 2009
- Member Proposal and Dissertation Reading Committee for Salih Tekin (ISyE), Fall 2010, Spring 2011
- Member Proposal and Dissertation Reading Committee for Bo Zhang (ISyE), Fall 2010, Spring 2011
- Member Proposal and Dissertation Reading Committee for Shuangchi He (ISyE), Spring 2011, Summer 2011
- Member Proposal and Dissertation Reading Committee for Judy Lee (ISyE), Spring 2013 and Spring 2014
- Member Proposal and Dissertation Reading Committee for Soheil Shayegh (ISyE), Summer 2013 and Summer 2014
- Member Proposal and Dissertation Reading Committee for Xinchang Wang (ISyE), Spring 2015 and Summer 2015
- Member Proposal and Dissertation Reading Committee for Heli Zhou Spring and Summer 2016.
- Member Proposal and Dissertation Reading Committee for Ran Li Spring and Fall 2016.
- Member Proposal and Dissertation Reading Committee for Yuan Li Fall 2016 and Summer 2017.
- Member Proposal and Dissertation Reading Committee for Reading Committee for Michael Ibrahim Fall 2018 and Summer 2019

- Member Proposal and Dissertation Reading Committee for Reading Committee for Reid Bishop Summer 2019 and Fall 2019
- Member Proposal and Dissertation Reading Committee for Daan Rutten Spring 2023 and Spring 2024
- Member Dissertation Reading Committee for Xinyu Liu Summer 2024
- Member Proposal Reading Committee for Xiaochen Shi Summer 2025

b. **External**

- Member Proposal and Dissertation Reading Committee for Sherwin Doroudi (Carnegie Mellon University) Fall 2015 and Spring 2016

C. Educational Innovations and Other Contributions

Other Ph.D. student collaborators

1. April Zhuoting Yu (Graduated Summer 2023, Amazon)
2. Dr. Xinchang Wang (Graduated Summer 2015, Assistant Professor, Washington State University)
3. Dr. Bo Zhang (Graduated Spring 2011, Lyft, INFORMS Nicholson Prize winner)

VI. Service

A. Professional Contributions

1. **Editorial Board Memberships**

- Departmental Editor, IIE Transactions December 2005-February 2009
- Associate Editor, *IEEE Transactions on Reliability*, November 1996-November 2000

2. **Society Offices, Activities, and Membership**

- INFORMS Applied Probability Society Secretary/Treasurer 1999–present
- Member, Institute for Operations Research and Management Science (INFORMS), 1992-present
- Member, INFORMS Applied Probability Society, 1995-present
- Member, IIE Spring 2018-2024

3. **Organization and Chairmanship of Technical Sessions, Workshops, and Conferences**

- Session Organizer, INFORMS National Meeting, **October 2025**

- General Co-chair INFORMS Applied Probability Meeting **July 2025**
- Session Organizer, INFORMS National Meeting, November 2024
- Session Organizer, INFORMS Applied Probability Meeting, June 2023
- Organizing Committee, INFORMS Applied Probability Meeting, July 2019
- Organizing Committee, INFORMS Applied Probability Meeting, July 2017
- Session Organizer, INFORMS National Meeting, November 2015
- Organizing Committee, INFORMS Applied Probability Meeting, July 2015
- Session Organizer, INFORMS National Meeting, November 2014
- Session Organizer, INFORMS National Meeting, November 2013
- Session Organizer, INFORMS National Meeting, November 2011
- Organizing Committee, INFORMS Applied Probability Meeting, July 2011
- Session Organizer, INFORMS National Meeting, October 2009
- Organizing Committee, INFORMS Applied Probability Meeting, July 2009
- Session Organizer, INFORMS National Meeting, October 2008
- Session Organizer, INFORMS National Meeting, November 2007
- Session Organizer, INFORMS Applied Probability Meeting, July 2007
- Session Organizer, INFORMS National Meeting, November 2005
- Session Organizer, INFORMS Applied Probability Meeting, July 2005
- Session Organizer, INFORMS National Meeting, October 2004
- Session Organizer, INFORMS National Meeting, October 2003
- Session Organizer, INFORMS Applied Probability Meeting, July 2001
- Session Organizer, INFORMS National Meeting, Fall 2000
- Session Organizer, INFORMS National Meeting, Spring 2000
- Session Organizer, INFORMS Applied Probability Meeting, July 1999
- Session Organizer, INFORMS National Meeting, Spring 1999
- Session Organizer, INFORMS National Meeting, Fall 1998
- Session Organizer, INFORMS National Meeting, Fall 1996

4. **Technical Journal or Conference Referee Activities**

- *IEEE Transactions on Reliability*
- *IIE Transactions*

- *Stochastic Models*
- *Queueing Systems*
- *Naval Research Logistics*
- *Journal of Manufacturing Systems*
- *International Journal of Flexible Manufacturing Systems*
- *European Journal of Operational Research*
- *Operations Research Letters*
- *Operations Research*
- *IEEE Transactions on Automatic Control*
- *Management Science*
- *Automatica*
- *Mathematics of Operations Research*
- *Journal of Applied Probability*
- *Probability in Engineering and Informational Sciences*
- *Manufacturing and Service Operations Management*
- *Discrete Event Dynamical Systems*
- *Production and Operations Management*
- *Stochastic Systems*
- *Journal of the Operational Research Society*

5. **Proposal Panels and Reviews**

- National Science Foundation Panel reviewer 2021
- National Science Foundation Panel reviewer 2016
- National Science Foundation Panel reviewer 2015
- National Science Foundation Panel reviewer 2001
- National Science Foundation Panel reviewer 2001
- National Science Foundation Panel reviewer 1998
- National Science Foundation Panel reviewer 1997

6. **Other Involvement**

- INFORMS Nicholson Prize Committee co-chair 2017
- INFORMS Nicholson Prize Committee Judge 2016
- INFORMS JFIG Paper Competition, chair, 2010
- INFORMS JFIG Paper Competition Reviewer 2006
- INFORMS JFIG Paper Competition Reviewer 2003

B. Public and Community Service

C. Institute Contributions

List all committee involvement and leadership, and other activities within Georgia Tech, indicate whether Institute, college, or school/department level. Internal contributions to other organizations for which you were previously employed, if any, may be included. Do not list service on thesis or dissertation committees (should be listed under IV.B).

1. Institute Committee Service

- Member, Institute Level Post Tenure Review Appeals Committee, Summer 2024–present
- Member, Institute Level Graduate Committee Fall 2014–Summer 2016
- Member, Institute Level Honor Committee Fall 2007–Spring 2010

2. College Committee Service

- Member, College of Engineering RPT Committee Fall 2010–Spring 2012

3. School Committee Service

- Member, ISyE Post Tenure Review Committee Fall 2024–Spring 2025
- Member, ISyE Undergraduate Committee Fall 2024–present
- Chair, ISyE Graduate Committee Fall 2022–Summer 2025
- Member, ISyE Chair Search Committee Spring 2024–Fall 2024
- Member, ISyE Post Tenure Review Committee Fall 2023–Spring 2024
- Chair, ISyE Named Post-doc Search/Evaluation Committee, Spring 2024
- Chair, ISyE Operations Research Coordinating Committee Fall 2019–Fall 2021
- Member, ISyE Awards Committee Fall 2019–Fall 2021
- Member, ISyE Advisory Committee Fall 2020–Fall 2022
- Member, ISyE Faculty Search Committee Fall 2020–Summer 2023 (co-chair 2022–2023)
- Member, ISyE Post Tenure Review Committee Fall 2021–Spring 2022
- Member, ISyE Chair Review Committee Fall 2019
- Chair, ISyE Post Tenure Review Committee Fall 2018–Spring 2019

- Chair, ISyE Post Tenure Review Committee Fall 2017–Spring 2018
- Member, ISyE Graduate Committee Fall 2017–Summer 2021 (chair Fall 2021–Summer 2022)
- Chair, ISyE Post Tenure Review Committee Fall 2016–Spring 2017
- Chair, ISyE Post Tenure Review Committee Fall 2015–Spring 2016
- Chair, ISyE Post Tenure Review Committee Fall 2014–Spring 2015
- Chair, ISyE Post Tenure Review Committee Fall 2013–Spring 2014
- Member, ISyE Post Tenure Review Committee Fall 2012–Spring 2013
- Member, ISyE Undergraduate Committee Fall 2012–Summer 2014 (chair Fall 2012–Spring 2013)
- Member, ISyE Post Tenure Review Committee Fall 2011–Spring 2012
- Member, ISyE Chair Search Committee Spring 2010–Summer 2011
- Member, ISyE Awards Committee Fall 2010–Spring 2012
- Member, ISyE Post Tenure Review Committee Fall 2009–Spring 2010
- Member, ISyE Distinguished Seminar Series Committee, Fall 2005–Summer 2009
- Member, ISyE Undergraduate Committee, Summer 2006–Summer 2008
- Member, ISyE Faculty Search Committee, Summer 2005–Summer 2008
- Member, ISyE RPT Review Process Committee, Spring 2006–Summer 2006
- Member, ISyE Off-site Meeting Planning Committee, Spring 2006–Fall 2006
- Member, ISyE Graduate Committee, Fall 2004–Summer 2006 (chair, Fall 2005–Summer 2006)
- Member, ISyE Advisory Committee, Fall 2002–Fall 2004

4. **Other Institute Service Contributions**

- (a) Area committee member for Ton Dieker (Summer 2013)
- (b) Area committee chair for David Goldberg (Fall 2013)
- (c) Area committee member for Siva Theja Maguluri (Fall 2019)
- (d) Area committee member for Debankur Mukharjee (Fall 2021)
- (e) Area committee member for Siva Theja Maguluri (Fall 2022)
- (f) Area committee member for Enlu Zhou (Fall 2022)
- (g) Area committee member for Debankur Mukharjee (Fall 2024)
- (h) Jarvis Awards committee (Fall 2024)