CURRICULUM VITÆ

Esma Nur Cinicioglu, PhD

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Istanbul University, School of Business, Quantitative Methods Division,
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Education:

- **Ph.D. in Business Administration, University of Kansas,** May 2008,
  Major: Decision Sciences
  Minors: Operations Management
                        Econometrics

- **Dissertation Title: "On Solving Stochastic PERT Networks and Using RFIDs for Operations Management"**
  Recipient of the Max E. Fessler Dissertation Award, 2008
  Thesis Advisor: Prakash P. Shenoy, *Ronald G. Harper Distinguished Professor of Artificial Intelligence*

- **Bachelor of Science, in Management of Information Systems**
  Marmara University, Istanbul, Turkey, June 2002

- **High School Diploma**, June 1998
  Deutsche Schule Istanbul, Turkey

Professional Experience:

- **Visiting Professor, Queen Mary University of London,** (February 2019-February 2020)
- **Associate Professor, PhD, Istanbul University, School of Business,** (2015 −)
- **Assistant Professor, PhD, Istanbul University, School of Business,** (January 2009 − 2015)
- **Graduate Research / Teaching Assistant / Instructor, University of Kansas, School of Business** (2003 − 2008)

Publications:

Journal Papers

- Mbarak, W.K., Cinicioglu, E.N, Cinicioglu, O. "SPT Based determination of undrained shear strength: Regression models and machine learning, Frontiers of Structural and Civil Engineering, 185-198, 14 (1), 2020

- Cinicioglu, E.N, Ulusoy, G., Önsel Ekici, S., Ülengin, F., Ülengin, B., "Exploring The Intereraction Between Competitiveness of a Country and Innovation Using Bayesian Network, Innovation and Development, *175-209, (7), 2,* 2017 http://www.tandfonline.com/doi/abs/10.1080/2157930X.2017.1292617

- Cinicioglu, E. N., & Shenoy, P. P. (2016). A new heuristic for learning Bayesian networks from limited datasets: a real-time recommendation system application with RFID systems in grocery stores. *Annals of Operations Research*, *244*(2), 385-405. **(SCI)** https://link.springer.com/article/10.1007/s10479-012-1171-9

- Cinicioglu, E.N., "Decision Making with Consonant Belief Functions: Discrepancy Resulting with the Probability Transformation Method Used", Yugoslav Journal of Operations Research, ISSN: 0354-0243 EISSN: 2334-6043, 24(2), 1-12 pp., 2014, http://www.doiserbia.nb.rs/img/doi/0354-0243/2014/0354-02431400033C.pdf

- Cinicioglu, E.N., Onsel, S., Ulengin, F., " Competitiveness Analysis of Automotive Industry in Turkey Using Bayesian Networks", Expert Systems with Applications, Vol. 39, No. 12, 2012, pp. 10923--10932 **(SCIE)** http://www.sciencedirect.com/science/article/pii/S0957417412005027

- Cinicioglu, E.N., Shenoy, P. P., "Arc Reversals in Hybrid Bayesian Networks with Deterministic Variables", International Journal of Approximate Reasoning, Vol. 50, No. 5, 2009, pp. 763--777   **(SCI)** http://kuscholarworks.ku.edu/dspace/bitstream/1808/5229/1/IJAR09.pdf

- Bozcu, G., Çinicioğlu, E.N, "Ulusal güvenlik karar problemlerinde karşıtsal risk analizi: Doğu Akdeniz problemi örnek modelleme", Ardahan Üniversitesi İktisadi ve İdari Bilimler Fakültesi, Vol. 5 (1), pp. 62-73 https://eds.s.ebscohost.com/eds/pdfviewer/pdfviewer?vid=0&sid=f13cd24b-3ae1-402d-89d2-176ac31e8d5b%40redis

- E.N. Çinicioğlu, M. Atalay, H. Yorulmaz, "Trafik Kazaları Analizi için Bayes Ağları Modeli", Bilişim Teknolojileri Dergisi , Cilt 6, Sayı: 2, 41-52 pp., 2013 http://www.btd.gazi.edu.tr/article/view/1041000223

Book Chapters

- Çinicioğlu E.N., Önsel Ekici Ş. , Ülengin F., "Bayes Ağ Yapısının Oluşturulmasında Farklı Yaklaşımlar: Nedensel Bayes Ağları ve Veriden Ağ Öğrenme", Halil Sarıaslan Armağan Kitap, Ali Argun KARACABEY, Ed., Siyasal Kitabevi-Ünal Sevindik, Ankara, ss.267-286,2015, http://openaccess.dogus.edu.tr:8080/bitstream/handle/11376/2695/onsel_2015_t.pdf?sequence=1&isAllowed=y

Conference Proceedings

International Conferences

- Çinicioğlu E.N., Önsel Ş. , Ülengin F., Ulusoy G. , "Exploring the relationship between innovation, personal freedom and institutions at country level", 8th Annual Conference of the European Decision Sciences Institute (EDSI 2017), Granada, Spain, May 29th – June 1st 2017, pp.24-24

- Cinicioglu, E. N., Yenilmez, T. 2016, June, "Determination of Variables for a Bayesian Network and the Most Precious One", Proceedings of the 16th International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems, pp. 313-325. Springer International Publishing. http://link.springer.com/chapter/10.1007%2F978-3-319-40596-4_27

- Cinicioglu, E.N., Büyükuğur, G., 2014, July, "How to Create Better Performing Bayesian Networks: A Heuristic Approach for Variable Selection", Proceedings of the 15th International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems, pp. 527-535. Springer International Publishing. http://link.springer.com/chapter/10.1007%2F978-3-319-08795-5_54

- Cinicioglu E. N. , "Decision Making with Consonant Belief Functions: The Discrepancy Resulting with the Probability Transformation Method Used", BALCOR XI Balkan Conference on Operations Research, September, 2013 , Belgrad, SERBIA

- Cinicioglu E. N., Ülengin F., Ulusoy G., Ülengin B., Önsel Ş., "The Basic Competitiveness Factors Shaping The Innovation Performance Of Countries", IIE International Industrial Engineering Conference, , 26-28 June 2013 , pp.1-10, Istanbul, TURKEY http://research.sabanciuniv.edu/25012/1/IIE2013-Cinicioglu-Ulusoy-Onsel-Ulengin.pdf

- Cinicioglu E. N., Önsel Ekici Ş., Ülengin F., Ulusoy G., "Providing A Road Map To Improve Innovation Performance Of The Countries Through Bayesian Nets", 26th European Conference on Operations Research, July, 2013, Rome, ITALY

- Cinicioglu, E.N., Srivastava R.P.; "Data Mining for Fraud Detection Using Bayesian Networks", 7th INFORMS Workshop on Data Mining and Health Informatics (DM-HI 2012), 2012, October, Phoenix, USA

- Cinicioglu, E.N., "Computation of the Project Completion Time: High Discrepancy of Results Depending on the Method Used", 8th World Congress in Probability and Statistics, 2012, July, Istanbul

- Cinicioglu, E.N., Önsel, Ş., Ülengin, F., "Competitiveness Analysis in Turkey Using Bayesian Networks", Yeditepe International Research Conference on Bayesian Learning, (YIRCoBL), 2011, June, Istanbul

- Cinicioglu, E.N., Önsel, Ş., Ülengin, F., "Competitiveness Analysis in Turkey Using Bayesian Networks", Yeditepe International Research Conference on Bayesian Learning, (YIRCoBL), 2011, June, Istanbul

- Ertek, G., Cinicioglu, E.N., Demirer, D., Yoruk, E. H., "A Framework for Automated Association Mining Over Multiple Databases", International Symposium on INnovations in Intelligent SysTems and Applications, (INISTA), 2011, June, Istanbul http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=5946050&tag=1

- Cinicioglu, E.N. "Improving the Service Level in Grocery Stores: Are you the right Candidate for Item Level RFID Tagging?", European Conference on Operational Research 2010 (EURO XXIV), pp. 299, 2010, July, Lisbon

- Cinicioglu, E.N., Shenoy, P. P., "Using Mixtures of Truncated Exponentials for Solving Stochastic PERT Networks," in J. Vejnarova and T. Kroupa (eds.), Proceedings of the 8th Workshop on Uncertainty Processing (WUPES-09), pp. 269--283, University of Economics, Prague, Czech Republic 2009 http://web.ku.edu/~pshenoy/Papers/WUPES09b.pdf

- Cinicioglu, E.N., Shenoy, P. P., Kocabasoglu, C., "Use of Radio Frequency Identification for Targeted Advertising: A Collaborative Filtering Approach Using

Bayesian Networks," in K. Mellouli (ed.), Proceedings of 9th European Conference on Symbolic and Quantitative Approaches to Reasoning with Uncertainty, (ECSQARU), Lecture Notes in Artificial Intelligence, Vol. 4724, 2007, pp. 889−900, Springer-Verlag
http://www.springerlink.com/content/p375115864074214/

- Cinicioglu, E.N., Shenoy, P. P., "Solving Stochastic PERT Networks Exactly Using Hybrid Bayesian Networks," in J. Vejnarova and T. Kroupa (eds.), Proceedings of the 7th Workshop on Uncertainty Processing (WUPES-06), pp. 183−197, 2006, Mikulov, Czech Republic, Oeconomica Publishers
https://kuscholarworks.ku.edu/dspace/bitstream/1808/1081/1/WUPES06.pdf

- Cinicioglu, E.N., Shenoy, P. P., "On Walley's Combination Rule for Statistical Evidence," Proceedings of the Eleventh International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems (IPMU-06), pp. 386−394, 2006, Les Cordeliers, Paris, France
https://kuscholarworks.ku.edu/dspace/bitstream/1808/989/1/IPMU06.pdf

- Cinicioglu, E.N., Shenoy, P.P.; "Arc Reversals in Hybrid Bayesian Networks with Deterministic Variables" The Institute for Operations Research and Management Sciences (INFORMS) Annual Meeting, pp. 100, SC21, 2007, November, Seattle

- Shenoy, P.P., Cinicioglu, E.N.; "Computing the Full Distribution of the Max of Two Gaussians Using Hybrid Bayesian Networks", The Institute for Operations Research and Management Sciences (INFORMS) Annual Meeting, pp. 100, SC21, 2007, November, Seattle

Regional Conferences

- Çinicioğlu, E.N., Önsel Ekici Ş. , Ülengin F. "Dinamik Bayes Ağları Aracılığıyla Ülkelerin Kişisel ve Ekonomik Özgürlük Seviyeleri ile Inovasyon Düzeyleri Arasındaki İlişkinin İrdelenmesi", Yöneylem Araştırması ve Endüstri Mühendisliği 38. Ulusal Kongresi, Anadolu University, 2018, June, Eskişehir

- Çinicioğlu, E.N., Yenilmez, T. "Bayes Ağları'nda Değişken Seçimi", Yöneylem Araştırması ve Endüstri Mühendisliği 36. Ulusal Kongresi, Yaşar University, 2016, July, Izmir

- Çinicioğlu, E.N., Önsel Ekici, Ş., Ülengin, F., "Bayes Ağ Yapısının Oluşturulmasında Farklı Yaklaşımlar: Nedensel Bayes Ağları ve Veriden Ağ Öğrenme", Yöneylem Araştırması ve Endüstri Mühendisliği 35. Ulusal Kongresi, Middle East Technical University, 2015, September, Ankara

- Çinicioğlu, E.N., " A Comparison of Decision Trees and Influence Diagrams: Similarities and Differences on Capabilities", Yöneylem Araştırması ve Endüstri Mühendisliği 32. Ulusal Kongresi, Doğuş Üniversitesi, 2012, June, Istanbul

- Ulusoy, G., Çinicioğlu, E.N., Önsel, Ş., Ülengin, F., "Ülkelerin Rekabet Analizinde Bayes Ağ Yaklaşımı", Yöneylem Araştırması ve Endüstri Mühendisliği 32. Ulusal Kongresi, Doğuş Üniversitesi, 2012, June, Istanbul

- Çinicioğlu, E.N., Önsel, Ş., Ülengin, F., "Bayes Ağları Yardımıyla Türk Otomotiv Sektörünün Rekabet Gücü Analizi", Yöneylem Araştırması ve Endüstri Mühendisliği 31. Ulusal Kongresi, Sakarya Üniversitesi, 2011, July, Istanbul

- Atalay, M., Yorulmaz, H., Onay, O., Çinicioğlu, E.N., "Trafik Kazaları Analizi için Bayes Ağları Modeli", Yöneylem Araştırması ve Endüstri Mühendisliği 31. Ulusal Kongresi, Sakarya Üniversitesi, 2011, July, Istanbul

- Temel, B., Doğruel Anuşlu, M., Çinicioğlu, E.N., Güngör, G., "Yaşam Doyumu Analizi'nde Bayes Ağları Yaklaşımı", Yöneylem Araştırması ve Endüstri Mühendisliği 31. Ulusal Kongresi, Sakarya Üniversitesi, 2011, July, Istanbul

- Cinicioglu, E.N. "On Decision Making with Consonant Belief Functions: Discrepancy Resulting with the Probability Transformation Method Used" Yöneylem Araştırması ve Endüstri Mühendisliği 30. Ulusal Kongresi, Sabancı University, 2010, July, Istanbul

- Cinicioglu, E.N. "Ürün Bazında RFID Kullanımı ve Müşteri Talebine Cevap Vermedeki Etkisi" 9. Ulusal Üretim Araştırmaları Sempozyumu, Osmangazi University, 2009, October, Eskisehir

- Cinicioglu, E.N., Shenoy, P. P. "Learning Bayesian Networks from Limited Data Sets: A Bayesian Network Application Using RFID Systems for Real-Time Recommendation in Grocery Stores" Yöneylem Araştırması ve Endüstri Mühendisliği 29. Ulusal Kongresi, Bilkent University, 2009, June, Ankara

Conference Presentations:

International Conferences

- 8th Annual Conference of the European Decision Sciences Institute, June, 2017, Granada, Spain
- 16th International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems (IPMU), 2016, June 20-24, Eindhoven, Netherlands

- 15th International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems (IPMU), 2014, July 15−19, Montpellier, France
- 26th European Conference on Operational Research (EURO XXIV), 2013, July 1−4, Rome, Italy
- IIE International Industrial Engineering Conference, 2013 , June 26-28, Istanbul, TURKEY
- 7th INFORMS Workshop on Data Mining and Health Informatics (DM-HI), 2012, October 13
- 8th World Congress in Probability and Statistics, 2012, July 9 − 14
- Yeditepe International Research Conference on Bayesian Learning (YIRCoBL), 2011, June 15 − 17
- 24th European Conference on Operational Research (EURO XXIV), 2010, July 11−14, Lisbon, Portugal
- 8th Workshop on Uncertainty Processing (WUPES), 2009, September 19−23, Liblice, Czech Republic
- 9th European Conference on Symbolic and Quantitative Approaches to Reasoning with Uncertainty, (ECSQARU), 2007, October 31, November 1−2, Hammamet, Tunisia
- The Institute for Operations Research and Management Sciences (INFORMS) Annual Meeting, 2007, November, Seattle, USA
- 7th Workshop on Uncertainty Processing (WUPES), 2006, September 16-20, Mikulov, Czech Republic
- 11th International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems (IPMU), 2006, July 2−7, Paris, France

Regional Conferences

- Yöneylem Araştırması ve Endüstri Mühendisliği 38. Ulusal Kongresi, Anadolu University, 2018, June, Eskişehir
- Yöneylem Araştırması ve Endüstri Mühendisliği 36. Ulusal Kongresi, Yaşar University, 2016, July, Izmir
- Yöneylem Araştırması ve Endüstri Mühendisliği 35. Ulusal Kongresi, Middle East Technical University, 2015, September, Ankara
- Yöneylem Araştırması ve Endüstri Mühendisliği 32. Ulusal Kongresi, Doğuş University, 2012, June, Istanbul
- Yöneylem Araştırması ve Endüstri Mühendisliği 31. Ulusal Kongresi, Sakarya University, 2011, June, Sakarya
- Yöneylem Araştırması ve Endüstri Mühendisliği 30. Ulusal Kongresi, Sabanci University, 2010, July, Istanbul
- 9. Ulusal Üretim Araştırmaları Sempozyumu, Osmangazi University, 2009, October, Eskisehir

- Yöneylem Araştırması ve Endüstri Mühendisliği 29. Ulusal Kongresi, Bilkent University, 2009, June, Ankara

Research and Teaching Interests:

Research

- Bayesian networks
- Variable selection in Bayesian networks
- Heuristic for learning BNs from data
- Belief functions theory and Applications
- Adversarial Risk Analysis
- Uncertainty management

Teaching

- Decision Sciences
- Operations Research
- Uncertainty Analysis

Research Grants and Projects:

- Security Threat Modelling and Risk Analysis Against Terrorism Using Bayesian Networks, Tübitak 2219, 18.02.2019 -17.03.2021
- Genlesim Açılarının Zeminlerin Statik Ve Dinamik Davranısı Üzerindeki Etkilerinin Arastırılması Ve Zemin Özelliklerine Baglı Olarak Tanımlanması, -Tübitak 1001, Project role: Researcher

Languages:

- English- fluent
- German
- Turkish (native)

Invited Talks:

- How to Create Better Performing Bayesian Networks: A Heuristic Approach for Variable Selection, Sabanci University, School of Business and Manufacturing Systems and Industrial Engineering Seminars, April 2015
- A New Heuristic for Learning Bayesian Networks from Limited Datasets: A Real-Time Recommendation System Application with RFID Systems in Grocery Stores,

Sabanci University, Manufacturing Systems and Industrial Engineering Department, March 2012

- Two Essays: On Solving Stochastic PERT Networks and Use of RFID Systems for Real Time Recommendation, Sabanci University, Manufacturing Systems and Industrial Engineering Department, November 2009
- Solving Stochastic PERT Netwoks Using Hybrid Bayesian Networks, Bogazici University, Industrial Engineering Department, October 2007
- On Solving Stochastic PERT Netwoks and Using RFIDs for Operations Management, Marmara University, Industrial Engineering Department, November 2008

Honors and Awards:

- Max E. Fessler Dissertation Award, 2008
- School of Business Dissertation Fellowship, 2007
- School of Business Dissertation Fellowship, 2006
- University of Kansas, School of Business, Dean's List, 2004.
- University of Kansas, Graduate School of Tuition Scholarship 2003-2004
- Graduation from Marmara University, MIS, with the first ranking
- Siemens Company, Outstanding Scholarship Award, 2000, 2001, 2002

Memberships

- INFORMS (Institute for Operations Research and the Management Sciences)
- Operational Research Society of Turkey
- SIPTA (Society for Imprecise Probabilities: Theories and Applications)

Certifications and Accreditations

- International Business Ethics Faculty Development Workshop at the University of Kansas, May 23-27, 2005
- First SIPTA School on Imprecise Probabilities, July 27-31, 2004, Lugano, Switzerland

Teaching Experiences:

PhD Level

- Istanbul University, The Institute for Graduate Studies in Social Sciences, "**Graphical Models: Uncertainty Analysis and Decision Making**"

Graduate Level

Istanbul University, Institute of Business Economy

- Business Analytics, MS program
- Quantitative Decision Making, Executive MBA program
- Business Simulation, MBA program
- Statistics, Istanbul University, Institute of Business Economy, MBA program

Undergraduate Level

Istanbul University

- Probabilistic and Deterministic Models in Decision Sciences
- Introduction to R and Decision Models
- Business Mathematics
- Basic Mathematics I
- Basic Mathematics II

Graduate Level

- Probabilistic Graphical Networks and Uncertainty Analysis

University of Kansas

- School of Business, "**Management Science and Operations Management**", Spring 2006, June 2005

Service / Activities:

Academic Community

Area Editor

- Istanbul Management Journal, 2020 - 2021

Program Committee Member

- Technical program committee member, The Third International Conference on Big Data, Small Data, Linked Data and Open Data, 2017
- International program committee member, 16th International Conference on Information Processing and Knowledge Management, 2016

- Technical program committee member, The Second International Conference on Big Data, Small Data, Linked Data and Open Data, 2016
- Technical program committee member, First International Conference on Big Data, Small Data, Linked Data and Open Data, 2015
- Executive committee member, Yeditepe International Conference on Bayesian Learning, 2011

Conference Activities

- Session Chair, 36th Operations Research and Industrial Engineering Conference, YAEM 2016, Izmir, Turkey, 2016
- Session Chair, 35th Operations Research and Industrial Engineering Conference, YAEM 2015, Ankara, Turkey, 2015
- Session Chair, 7th INFORMS Workshop on Data Mining and Health Informatics, INFORMS, ABD, 2013
- Session Chair, 32nd Operations Research and Industrial Engineering Conference, YAEM 2012, İstanbul, Turkey, 2012
- Session Chair, 31st Operations Research and Industrial Engineering Conference, YAEM 2011, Sakarya, Turkey, 2011
- Session Chair, 9th Symposium on Production Research, ÜAS 2009, Eskişehir, Turkey

Editorial Service-Referee for
https://publons.com/author/980998/esma-nur-cinicioglu#profile

Journals

- Reviewer, Decision Sciences
- Reviewer, Knowledge Based Systems
- Reviewer, International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems
- Reviewer, Annals of Operations Research
- Reviewer, International Journal of Approximate Reasoning
- Reviewer, European Journal of Operational Research
- Area Editor for Turkish Journal of Electrical Engineering and Computer Sciences
- Reviewer, Journal of Network and Computer Applications
- Reviewer, Research in Transportation Economics
- Reviewer, Engineering Applications in Artificial Intelligence
- Reviewer, Technology Analysis & Strategic Management
- Reviewer, Maritime Policy & Management
- Reviewer, Computational Economics

Conferences

- Reviewer, 16th International Conference on Information Processing and Management of Uncertainty in Knowledge Based Systems (IPMU-2016), Eindhoven, Netherlands
- Reviewer, 11th International Conference on Information Processing and Management of Uncertainty in Knowledge Based Systems (IPMU-2006), Paris, France
- Reviewer, 2nd International Conference on Big Data, Small Data, Linked Data and Open Data, Lisbon, Portugal 2016
- Reviewer, First International Conference on Big Data, Small Data, Linked Data and Open Data, Barcelona, Spain, 2015
- Reviewer, 11th International Conference on Information Processing and Management of Uncertainty in Knowledge Based Systems (IPMU-2006), Paris, France
- Reviewer, VIII. Ulusal Üretim Araştırmaları Sempozyumu, ÜAS 2009

Service / Activities

Istanbul University

- o Istanbul University, Institute of Business Administration, MBA program coordinator, (2014-2015)
- o Istanbul University, Faculty of Business Administration, Accreditation Committee Member (2009 -2015)
- Eduniversal Istanbul University Faculty Coordinator (2011-ongoing)

University of Kansas

- Doctoral Program Representative to the School of Business Faculty Assembly, University of Kansas (2007)