

Curriculum Vitae

Name-Surname: Gökhan İzbirak

Nationality: Turkish Cypriot

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Academic Title: Professor

Education:

Degree	Field	University	Year
BS	Industrial Engineering	Middle East Technical University	1986
MBA	Business Administration	Eastern Mediterranean University	1993
PhD	Mathematics (Applied)	Eastern Mediterranean University	1999

Experience (Academic & Industry)

- Prof. Dr. (EMU - Dept. of Industrial Engineering) : 2022 – present
- Assoc. Prof. Dr. (EMU - Dept. of Industrial Engineering) : 2016 – 2022
- Chairman (EMU - Dept. of Industrial Engineering) : 2007 – 2023 (elected 5 consecutive periods)
- Asst. Prof. Dr. (EMU - Dept. of Industrial Engineering) : February 2000 – 2016
- Part-time Instructor (EMU – Dept. of Mathematics) : October 1998 – February 2000
- Research Assistant (EMU – Dept. of Mathematics) : October 1994 – September 1998
- Teaching Assistant (EMU – Dept. of Mathematics) : September 1991 – October 1994
- Factory Manager: UNIPAC Packaging Industries (Polly Peck International PLC, UK), 1990-1991
- Industrial Engineer: UNIPAC Packaging Industries (Polly Peck International PLC, UK), 1989-1990

Theses Supervised

MS Theses:

1. Mixed Zero-One Programming for Cell Formation in Cellular Manufacturing Systems (2008) – Seyed Arash Hashemoghli Darvha
2. Application of Measurement System Analysis at the ABC Company (2009) – Mohammad Khanjani
3. Heuristic Solutions for Electric Vehicle Routing Problem with Time Window and Recharging Stations (2014) – Iman Roozbeh
4. A New Framework Based on EFQM to Achieve Continuous Improvement in Higher Education Institutions (2015) – Mehrdad Soltanifar

PhD Theses:

1. Humanitarian Logistics: Optimization Techniques for Emergency Preparedness and Post-Earthquake Response (January 2017) - Arman Nedjati
2. Stochastic Facility Location Problem with Distributed Demands along the Network Edges (August 2017) – Mahmoud Golabi
3. Logistics of Aerial Delivery Systems (July 2018) – Seyed Mahdi Shavarani
4. Statistical Methods for Sustainability Measurement of Supply Chain Management (May 2020) – Faramarz Khosravi
5. Towards A Holistic Approach in Designing Responsive and Efficient Supply Chain (ongoing) – Omar Ali Mohammad Alkayid

Publications

SCI, SSCI, SCI-Expanded Journal articles

1. Gökhan İZBIRAK, Peter Kas, Emil Klafszky, and Levente Malyusz, "Approximation of Linear Programs by Bregman's D_F Projections", *European Journal of Operational Research*, Volume 126, No.1, pp.69-79, 2000.
2. Gökhan İZBIRAK, Murat Bengisu, Adham Mackieh, "Work Related Challenges for Visually Impaired Individuals in Turkey", *Journal of Visual Impairment and Blindness*, Volume 102, No. 5, pp.284-294, 2008.
3. Gökhan İZBIRAK, Sahand Daneshvar, Alireza Javadi, "Sensitivity Analysis on Modified Variable Returns to Scale in DEA Using Facet Analysis", *Computers & Industrial Engineering*, Volume 76, pp.32-39, October 2014.
4. Gökhan İZBIRAK, Bela Vizvari, Arman Nedjati, "Post-Earthquake Response by Small UAV Helicopters", *Natural Hazards*, Volume: 80 Issue: 3 Pages: 1669-1688, February 2016.
5. Gökhan İZBIRAK, Emine Atasoylu, Mazyar Ghadirinejad, Matina Ghasemi, "A Stochastic Model for the Ethanol Pharmacokinetics", *Iranian Journal of Public Health*, Volume 45, Issue 9, pp. 1170-1178, September 2016.
6. Gökhan İZBIRAK, Mahmoud Golabi, Mahdi Shavarani, "An edge-based stochastic facility location problem in UAV-supported humanitarian relief logistics: A case study of Tehran earthquake", *Natural Hazards*, Volume 87, Issue 3, pp. 1545-1565, July 2017.
7. Gökhan İZBIRAK, Arman Nedjati, Jamal Arkat, "Bi-objective covering tour location routing problem with replenishment at intermediate depots: Formulation and Meta-heuristics", *Computers & Industrial Engineering*, Volume 110, pp. 191-206, August 2017.
8. Gökhan İZBIRAK, Bela Vizvari, Arman Nedjati, "Post-Earthquake Response by Small UAV Helicopters", *Natural Hazards*, Volume: 80 Issue: 3 Pages: 1669-1688, January 2018 (correction paper for item 4 above).
9. Gökhan İZBIRAK, S. M. Shavarani, M. GhadiriNejad, F. Rismanchian, "Application of hierarchical facility location problem for optimization of a drone delivery system: case study of Amazon prime air in the city of San Francisco", *International Journal of Advanced Manufacturing Technology*, Volume 95, Issue 9-12, pp. 3141-3153, April 2018.
10. Gökhan İZBIRAK, Mahmoud Golabi, Jamal Arkat, "Multiple-server facility location problem with stochastic demands along the network edges", *Journal of Engineering Research*, December 2018.
11. Gökhan, İZBIRAK, Faramarz Khosravi, Kehinde Adewale Adesina, "An exponentially distributed stochastic model for sustainability measurement of a healthcare system", *Sustainability*, Volume 11, Issue 5, March 2019.
12. Gökhan İZBIRAK, Mahmoud Golabi, Seyed Mahdi Shavarani, Sam Mosallaeipour, "A Congested Capacitated Multi-Level Fuzzy Facility Location Problem: An Efficient Drone Delivery System" *Computers & Operations Research*, Volume 108, pp. 57-68, August 2019.
13. Gökhan, İZBIRAK, Faramarz Khosravi, "A Stakeholder perspective of social sustainability measurement in healthcare supply chain management", *Sustainable Cities and Society*, Volume 50, Article Number: 101681, October 2019.
14. Gökhan İZBIRAK, Bela Vizvari, Arman Nedjati, Mahmoud Golabi, Ferhat Gümüşbuğa, "Top-down approach to design the relief system in a metropolitan city using UAV technology, part I: the first 48 h", *Natural Hazards*, Vol. 99, Issue. 1, pp. 571-597, October 2019.
15. Gökhan İZBIRAK, Faramarz Khosravi, Mahdi Shavarani, "Application of bootstrap re-sampling method in statistical measurement of sustainability", *Socio-Economic Planning Sciences*, Volume 75, No 100781, June 2021.
16. Gökhan İZBIRAK, Mahmoud Golabi, Mahdi Shavarani, "A capacitated bi-objective location problem with uniformly distributed demands in the UAV-supported delivery operation", *International Transactions in Operational Research*, Volume 28, Issue 6, pp. 3220-3243, November 2021.
17. Gökhan, İZBIRAK, Faramarz Khosravi, "A copula-based exponential probabilistic model for factor-dependence social sustainability assessment", *Environment, Development and Sustainability*, Springer Netherlands, <https://doi.org/10.1007/s10668-023-04173-1>, November 2023.

International Refereed Journal articles

1. Gökhan İzbırak, Sahand Daneshvar, Mozghan Mansouri Kaleibar, "Determining the Best Game Cross Efficiency with VRS for Fuzzy Data", *Journal of Basic and Applied Scientific Research*, Vol. 2(11), pp.11904-11909, 2012.

2. Gökhan İzbirak, Sahand Daneshvar, Mozghan Mansouri Kaleibar, "Topological Indices of Hypercubes", Journal of Basic and Applied Scientific Research, Vol. 2(11), pp.11501-11505, 2012.
3. Gökhan İzbirak, Sahand Daneshvar, Bela Vizvari, Ali Asgar Hosseiny, "Modification of Centralized Resource Allocation Model with Variable Return to Scale Using Facet Analysis", Journal of Basic and Applied Scientific Research, Vol. 2(6), pp.6182-6187, 2012.
4. Gökhan İzbirak, Bela Vizvari, Arman Nedjati, Jamal Arkat, "Complete Coverage Path Planning for a Multi-UAV Response System in Post-Earthquake Assessment", Robotics, Volume 5, Issue 4, 26, December 2016.
5. Gökhan İzbirak, Faramarz Khosravi, "A Stochastic Analytic Hierarchy Process Based Weighting Model for Sustainability Measurement in an Organization", International Journal of Mechanical, Industrial and Aerospace Sciences, Vol. 14, No. 4, pp. 141-146, 2020.

International Conference Papers

1. Gökhan İZBIRAK, Murat Bengisu, and Adham Mackieh, "Problems Faced by Visually Impaired People at Work; A case of Turkey", International conference on "Problems and Success Factors in Business: Perspectives from Emerging Markets and Transition Economies III", pp. 61-72, September 21, 2006, International Atatürk Alatau University, Bishkek, Kyrgyzstan.
2. Gökhan İZBIRAK, Bela Vizvari, Zoltan Lakner, "Results of Primary Research of Socio-Economic Aspects for Forecasting of Used-Car Supply and Increasing of Abandoned Cars in the Northern Cyprus", 7th International Congress on Cyprus Studies, November 4-6, 2009, Eastern Mediterranean University Publications 2010, pp. 195-212, Gazimağusa, TRNC.
3. Sahand Daneshvar, Gokhan Izbirak, Alireza Javadi, "Sensitivity Analysis on Modified BCC Model Using Facet Analysis", 9th International Conference on Data Envelopment Analysis, Macedonia University, Thessaloniki, Greece , 25-29 August 2011.
4. Gökhan İZBIRAK, Sahand Daneshvar, Mozghan Mansouri Kaleibar, "Maximal Allocated Benefit and Minimal Allocated Cost and its Application in Stock Exchange of Tehran", 13th International Conference on Econometrics, Operations Research, and Statistics, May 24-26, 2012, Eastern Mediterranean University, Gazimağusa, TRNC.
5. Sahand Daneshvar, Gokhan Izbirak, Rohgayeh Niknami, "Classifying Inputs and Outputs Based on TOPSIS Method Using Modified DEA Model, 25th European Conference on Operational Research, Vilnius, Lithuania, 8-11 July 2012.
6. Sahand Daneshvar, Gokhan Izbirak, "Using Modified DEA Models in Development of Group Malmquist Productivity Index in Non-Discretionary Factors", 10th International Conference on Data Envelopment Analysis, Natal, Brazil, 27-30 August 2012.
7. Gökhan İZBIRAK, Sahand Daneshvar, Iman Roozbeh, "A Modified Data Envelopment Analysis Method for Priority Determination and Group Decision Making in the Analytic Hierarchy Process", 11th International Conference of Data Envelopment Analysis (DEA2013), Samsun 19 Mayıs University, June 27-30, 2013 Samsun, Turkey.
8. Gökhan İZBIRAK, Sahand Daneshvar, "Computing the Biennial Malmquist Index Using Modified Variable Returns to Scale DEA Model", 11th International Conference of Data Envelopment Analysis (DEA2013), Samsun 19 Mayıs University, June 27-30, 2013 Samsun, Turkey.
9. Gökhan İZBIRAK, Sahand Daneshvar, Merdad Alirezamohammadi, "Ranking All Units Based on Modified Constant Returns to Scale Data Envelopment Analysis Model", The 11th International Conference on Data Envelopment Analysis (DEA2013), Samsun 19 Mayıs University, June 27-30, 2013 Samsun, Turkey.
10. Gökhan İzbirak, Arman Nedjati, "Evaluating the Intellectual Capital by ANP Method in a Dairy Company", Procedia – Social and Behavioral Sciences, Volume 107, pp.136-144, 2013.
11. Gökhan İZBIRAK, Sahand Daneshvar, Fateme Najafzadeh, "Modification of Allocating the Fixed Cost with Prioritization Using Facet Analysis", Joint International Symposium on 'The Social Impacts of the Development in Information, Manufacturing and Service Systems', '44th International Conference on Computers & Industrial Engineering (CIE 44)' and '9th International Symposium on Intelligent Manufacturing and Service Systems (IMSS'14)', October 14-16, 2014 Istanbul, Turkey.

12. Gökhan İZBIRAK, Sahand Daneshvar, Adamu Musa Binyuy, “Computing the Malmquist Index Using Data Envelopment Analysis as an Improvement Measure for Educational Purposes”, 13th International Conference on Data Envelopment Analysis (DEA2015), Technische Universität (TU) Braunschweig, August 24–27, 2015 Braunschweig, Germany.
13. Gökhan İZBIRAK, Mahmoud Golabi, Arman Nedjati, “Multi-objective ATM Location Problem in a Metropolitan City”, The 2nd International Conference on Banking and Finance Perspectives, April 21, 2017, Famagusta, North Cyprus.
14. Gökhan İZBIRAK, Mahmoud Golabi, “Performance Evaluation of Human Resources at five-star Hotels in Kyrenia, Cyprus: A Data Envelopment Analysis Approach”, 7th Advances in Hospitality & Tourism Marketing and Management Conference, July 10-15, 2017, Famagusta, North Cyprus.
15. Gökhan İZBIRAK, Mahmoud Golabi, Bela Vizvari, “Information and Communication Technology in Disaster Management”, Sixth International Symposium on Engineering, Artificial Intelligence and Applications, March 6-8, 2019, Kyrenia, North Cyprus.

International Book Chapters

1. Gökhan İZBIRAK, Peter Kas, Emil Klafszky, and Levente Malyusz, “Young Programming”, C.A. Floudas and P.M. Pardalos (editors), Encyclopedia of Optimization, Kluwer Academic Publishers, Volume 5, Chapter 711, pp. 4061-4067, 2001.

National Conference Papers

1. Gökhan İZBIRAK, “Bregman Programming; Approximation of Linear Programs”, XXI. National Congress on Operations Research and Industrial Engineering (YA/EM 2000), 12-14 June 2000, Eastern Mediterranean University, Gazimağusa, TRNC.
2. Gökhan İZBIRAK, Peter KAS, “On geometric properties of some divergence functions”, VII. National Mathematics Symposium, 29/8/1994-2/9/1994, Bilkent University, Ankara, Turkey.
3. Gökhan İZBIRAK, “The RAS Method Viewed as Entropy Programming Problem, Some Generalizations”, VI. National Mathematics Symposium, 8-12 September 1993, EMU, Gazimağusa, TRNC.

Projects

Research Project (Type A): BAP-A-07-23. “Recent and Future Trends on the Car Market of TRNC”, EMU, 2008.

Courses taught (Undergraduate & Graduate)

- MATH103 Applied Mathematics for Business, Economics & Social Sciences – I
- MATH104 Applied Mathematics for Business, Economics & Social Sciences – II
- MATH106 Linear Algebra
- MATH151 Calculus – I
- MATH161 Discrete Mathematics
- MATH322 Probability and Statistical Methods
- MATH323 Probability Theory
- IENG112 Introduction to Industrial Engineering
- IENG313 Operations Research - I
- IENG323 Engineering Economy
- IENG419 Project Management
- IENG420 Fundamentals of Engineering Economy
- IENG431 Production Planning – II
- IENG492 Manufacturing & Service Systems Design Project
- IENG531 Production Planning & Scheduling

Awards

- Institute of Industrial Engineers, EMU-IIE Chapter #785, Certificate of Appreciation, 2006.
- EMU Rector, Certificate of Appreciation, 2011.

Professional Memberships

1. Institute of Industrial & Systems Engineers (IISE)
2. Turkish Cypriot Chamber of Industrial Engineers
3. YAD (Yöneylem Araştırması Derneği / OR Society of Turkey)
4. TMMOB Makine Mühendisleri Odası
5. Kıbrıs Türk Bilim ve Teknoloji Derneği

Administrative Positions

- EMU Dept. of IE, Department Chairman (June 2007 – January 2023)
- EMU Dept. of IE, Department Vice-chairman (2002-2005)

Services to University and the Community

- Board Member (EMU Center for Entrepreneurship & Innovation) between 2012-2015
- Member (EMU Student Disciplinary Committee) between 2004-2006
- Involved in the development of a new undergraduate program (Management Engineering), 2011
- Involved in the development of a new graduate program (non-thesis MS in Engineering Management), 2013
- Involved in the development of a new graduate program (non-thesis MS in Industrial Engineering), 2013
- Involved in the development of a new Double Major program (with Business Administration), 2013
- Involved in the curriculum changes (Industrial Eng./Management Eng. BS and IE in MS/PhD programs)
- Jury membership of many MS and PhD dissertation defences
- ABET Accreditation of Ind. Eng. undergraduate program in 2009 and re-accreditations in 2016 and 2023
- ABET Accreditation of Management Engineering undergraduate program in 2023
- Established Departmental Alumni Communication Network (*alumni*) on EMU e-mail server, 2008
- Attended to TV programs (to promote EMU, Department and the IE discipline)
- Wrote articles on newspapers and journals (to promote EMU, Department and the IE discipline)
- Visited high schools in Turkey and in the TRNC to promote EMU, Department and the IE discipline
- Promoted EMU, Department and the IE/MANE discipline to the visiting TRNC High School students
- Attended Student Exhibitions Fairs in Pakistan, Bahrain, Jordan, Egypt, Kenya and Turkey
- Organized many seminars for EMU Career Week
- Trained local professionals on project management (VETLAM II, EU-funded Project), 2018
- Promoted EMU, Department and the IE/MANE discipline to many high schools of Turkey (Zoom)