

CURRICULUM VITAE

Can AKKAN

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ACADEMIC EXPERIENCE

May 2017 – present

Sabancı University, Faculty of Management, Professor

February 2012 – July 2012

MIT Sloan School of Management, International Faculty Fellow.

November 2005 – May 2017

Sabancı University, Faculty of Management, Associate Professor

February 2004 – November 2005

Sabancı University, Faculty of Management, Assistant Professor

November 2003 – January 2004

Sabancı University, Faculty of Management, Visiting Professor

September 1993 – August 1995 and January 1997 – September 2003

Koç University, College of Administrative Sciences and Economics, Assistant Professor.

September 1989 – June 1993

Cornell University (Ithaca, NY), School of Operations Research and Industrial Engineering, Teaching Assistant.

OTHER WORK EXPERIENCE

September 1995 – December 1996

Lieutenant, Army Language School (Istanbul, Turkey), Teacher of English as a Second Language (as Obligatory Military Service).

RESEARCH INTERESTS

Deep Learning/Machine Learning, Robustness in Scheduling and Rescheduling
Production and Project Scheduling, Timetabling
Applied Discrete Optimization, Design of Algorithms/Heuristics

TEACHING EXPERIENCE

Executive MBA:

Operations Management, Decision Analysis, Management Science, Statistics,
Project Management, Risk Analysis.

MBA:

Management Science, Monte Carlo Simulation, Project Management, Operations Management, Statistics, Service Operations Management, Programming in VBA for MS Excel, Advanced MS Excel for Managers

Undergraduate:

Management Science, Monte Carlo Simulation, Quality Management, Statistics

Executive Education:

Quantitative and Managerial Decision Making, Business Analytics, Project Management, Operations Management

ADMINISTRATIVE WORK

June 2018 – June 2019

Academic Director of the Executive MBA Program, Sabancı University

Sept 2014 – June 2018

Academic Director of the MBA for Professionals Program, Sabancı University

April 2011 – September 2013

Associate Dean of Sabancı School of Management, Sabancı University

January 2006 – January 2011

Director of the MBA Program, Faculty Executive Committee Member, Faculty of Management, Sabancı University

January 2006 – September 2008

Director of the Executive MBA Program, Faculty Executive Committee Member, Faculty of Management, Sabancı University

October 2005 – January 2006

Co-Director of MBA and Executive MBA Programs, Faculty Executive Committee Member, Faculty of Management, Sabancı University

February 2004 – September 2005

Coordinator of the Undergraduate Management Program, Sabancı University.

EDUCATION

Ph.D.:

Operations Research (with minors in Business Administration and Statistics), Cornell University, Ithaca, N.Y., U.S.A, 1993

Bachelor of Science:

Industrial Engineering, Middle East Technical University, Ankara, Turkey, 1989

High School:

T.E.D. Ankara Koleji, Ankara, Turkey, 1985

PUBLICATIONS

Refereed Journals:

- Akkan, C., Gülcü, A., Kuş, Z. (2022) “Bi-criteria simulated annealing for the curriculum-based course timetabling problem with robustness approximation”, *Journal of Scheduling*, available online.
- Akkan, C., Gülcü, A., Kuş, Z. (2021) “Minimum penalty perturbation heuristics for curriculum-based timetables subject to multiple disruptions”, *Computers and Operations Research*, 132, 105306.
- Gülcü, A., Akkan, C. (2020) “Robust University Course Timetabling Problem Subject to Single and Multiple Disruptions”, *European Journal of Operational Research*, 283 (2), 630-646
- Akkan, C., Karadayı, M.A., Ekinci, Y., Ülengin, F., Uray, N., Karaosmanoğlu, E. (2020) “Efficiency analysis of emergency departments in metropolitan areas”, *Socio-Economic Planning Sciences*, 69, Article:100679.
- Ermis, G., Akkan, C. (2019) “Search Algorithms for Improving the Pareto Front in a Timetabling Problem with a Solution Network-based Robustness Measure”, *Annals of Operations Research*, 275, 101-121.
- Akkan, C., Gülcü, A. (2018) “A Bi-criteria Hybrid Genetic Algorithm with Robustness Objective for the Course Timetabling Problem”, *Computers & Operations Research*, 90, 22-32.
- Karadayı, M.A., Ekinci, Y., Akkan, C., Ülengin, F. (2017) “İstanbul İçin Acil Servis Birimlerinin Etkinliğinin Kategorik Veri Zarflama Analizi ile Değerlendirilmesi”, *Journal of Yaşar University*, 12, 31-39.
- Koçaş, C., Akkan, C. (2016) “A system for pricing the sales distribution from blockbusters to the long tail”, *Decision Support Systems*, 89, 56-65.
- Koçaş, C., Akkan, C. (2016) “How trending status and online ratings affect prices of homogeneous products”, *International Journal of Electronic Commerce*, 20 (3), 384-407.
- Akkan, C., Külünk, M., Erdem, M., Koçaş, C. (2016) “Finding robust timetables for project presentations of student teams”, *European Journal of Operational Research*, 249, 560-576.
- Akkan, C. (2015) “Improving schedule stability in single-machine rescheduling for new operation insertion”, *Computers & Operations Research*, 64, 198-209
- Altekin, F.T., Akkan, C. (2012) “Task-failure-driven rebalancing of disassembly lines”, *International Journal of Production Research*, 50, 18, 4955-4976
- Karabatı, S., Akkan, C. (2006) “Minimizing Sum of Completion Times on a Single Machine with Sequence-Dependent Family Setup Times”, *Journal of the Operational Research Society*, 57, 271-280.

- Akkan, C., Drexl, A., Kimms, A. (2005) "Generating an Acyclic Directed Graph with a Given Complexity Index by Constraint Logic Programming", *Journal of Logic and Algebraic Programming*, 62, 1-39.
- Akkan, C., Drexl, A., Kimms, A. (2005) "Network Decomposition-Based Benchmark Results for the Discrete Time-Cost Tradeoff Problem", *European Journal of Operational Research*, 165, 339-358.
- Akkan, C., Karabatı, S. (2004) "The Two-machine Flowshop Total Completion Time Problem: Improved Lower Bounds and a Branch-and-Bound Algorithm", *European Journal of Operational Research*, 159, 420-429.
- Akkan, C., (1997) "Finite-Capacity Scheduling-Based Planning for Revenue-Based Capacity Management", *European Journal of Operational Research*, 100, 170-179.
- Akkan, C., (1996) "Overtime Scheduling: An Application in Finite-Capacity Real-Time Scheduling", *Journal of the Operational Research Society*, 47, 1137-1149.

Refereed Chapters in Books:

- Akkan, C., (1998) "A Prioritized Re-insertion Approach to Production Rescheduling", in *Beyond Manufacturing Resource Planning: Advanced Models and Methods for Production Planning*, eds. A.Drexl and A. Kimms, Springer-Verlag.

Conference Proceedings:

- Akkan, C., Gülcü, A., Kuş, Z. (2020) Search Space Sampling by Simulated Annealing for Identifying Robust Solutions in Course Timetabling, 2020 IEEE Congress on Evolutionary Computation (CEC), 1-10.
- Gülcü, A., Akkan, C. (2018) Bi-Criteria Simulated Annealing Algorithms for the Robust University Course Timetabling Problem, *Proceedings of the 12th International Conference on the Practice and Theory of Automated Timetabling (PATAT-2018)*, 129-136
- Akkan, C., Gülcü, A. (2016) A Bi-criteria Hybrid Genetic Algorithm with Robustness Objective for the Course Timetabling Problem, *Proceedings of the 11th International Conference on the Practice and Theory of Automated Timetabling (PATAT-2016)*, 451-456
- Akkan, C., Ermis, G. (2016) Search Algorithms for Improving the Pareto Front in a Timetabling Problem with a Solution Network-based Robustness Measure, *Proceedings of the 11th International Conference on the Practice and Theory of Automated Timetabling (PATAT-2016)*, 457-461
- Akkan, C., Drexl, A. and Kimms, A. (2000) "Network Decomposition for the Discrete Time--Cost Tradeoff Problem Part 1: Models and Bounding Methods Part 2: Network Decomposition and Computational Results", *Proceedings of the 7th International Workshop on Project Management and Scheduling*, April 17-19, Osnabrück, Germany.

Akkan, C., Drexl, A. and Kimms, A. (2000) "Network Decomposition for the Discrete Time--Cost Tradeoff Problem Part 1: Models and Bounding Methods", *Proceedings of the 7th International Workshop on Project Management and Scheduling*, April 17-19, Osnabrück, Germany

Akkan, C. (1998) "A Lagrangian Heuristic for the discrete time-cost tradeoff problem", *Proceedings of the 6th International Workshop on Project Management and Scheduling*, July 7-9.

Akkan, C., Yedekçioğlu, O. A., Sayılan, E., and Barlass, Ş., (1995) "A Database Application for Help-Desk Scheduling and Management", *Proceedings of the European Simulation Symposium*.

RESEARCH GRANTS

TÜBİTAK 1001 Grant (No: 217M475) Algorithms to Find Robust Solutions for the University Timetabling Problem (Üniversite Ders Çizelgeleme Problemi İçin Gürbüz Çözüm Algoritmaları). (15/05/2018 – 15/05/2020) – Principal Investigator.

TÜBİTAK 3001 Grant (No: 214M661) Developing solution network algorithms for identifying robust solutions to an event timetabling problem (Bir etkinlik çizelgeleme modeli için gürbüz çözümler belirleme amacıyla çözüm ağı algoritmaları geliştirilmesi). (15/04/2015 – 15/04/2017) – Principal Investigator.

PhD AND MSc THESIS SUPERVISION

Ayla Gülcü, PhD thesis in Engineering Management, Marmara University, 2014
Thesis title: A Comprehensive Timetabling at Marmara University
Supervisor: Assoc. Prof. Serol Bulkan

Arda Şişbot, M.Sc. thesis in Industrial Engineering, Sabancı University, 2014
Thesis title: "Multi-project scheduling under mode duration uncertainties"
Co-supervisor with Prof. Gündüz Ulusoy.

EXECUTIVE EDUCATION COMPANIES/PROGRAMS (2006-Present)

Akzo-Nobel Turkey, Alcatel-Lucent, Anadolu-Isuzu, Aselsan, Avivasa, Ayaydın-Miroglio Group, , Borusan Leadership Academy, Central Bank of the Republic of Turkey, Continental Tires, Demirdöküm-Vaillant, Denim Tekstil, Eczacıbaşı Holding, Efes Beverage, Horoz Logistics, Kibar Holding Academy, Kale Group, Orka Group, P&G Turkey, PSA Grup (Turkey) , Sabancı Holding Leaders of Industry Program, Samet Kalıp, Sanko Enerji, Siemens Healthcare Turkey, Socar Turkey, Teksan, TNT Turkey, TURQUALITY, TÜPRAG Metal Madencilik (Kışladağ), Vestel Elektronik Marketing, Vizyon Leather.

AWARDS AND HONORS

CEEMAN (International Association for Management Development in Dynamic Societies)
Teaching Champion Award, 2015

Sabancı University, Class of 2010 Teaching Award – Ranked 3rd

Sabancı University, Class of 2009 Teaching Award – Ranked 5th

Sabancı University, Class of 2008 Teaching Award – Ranked 3rd

Cornell University, Operations Research and Industrial Engineering Teaching Assistant of the
Year, 1993

Cornell University, Graduate School Fellowship (1989-1993)

MEMBERSHIPS

Institute for Operations Research and Management Science (INFORMS)

Yöneylem Araştırması Derneği (YAD) – Turkish Operations Research Society

VOLUNTEER WORK

FIRST FRC (First Robotics Competition) Volunteer Judge (2016-present)