

Curriculum Vitae

Şanser Güz

[GitHub](#) | [Google Scholar](#) | [LinkedIn](#)

Boğaziçi University Department of Industrial Engineering
SESDYN Laboratory, Bebek, 34342, Istanbul, Turkey
sanserguz@gmail.com
(+90) 546 871 6557

EDUCATION

Boğaziçi University, Department of Industrial Engineering **Istanbul, Turkey**
M.Sc., Industrial Engineering GPA: 3.93/4.00 Expected July 2021

Thesis: Sustaining public healthcare systems against demographic challenges: dynamic simulation analysis and policy design

Boğaziçi University, Department of Industrial Engineering **Istanbul, Turkey**
B.Sc., Industrial Engineering GPA: 3.10/4.00 2019

Thesis: Building an interactive treatment simulator for chemotherapy-induced neutropenia (CIN) using granulocyte colony-stimulating factor (G-CSF)

University of Tsukuba, 筑波大学 **Ibaraki, Japan**
Student Exchange Program 2017-2018

Boğaziçi University, Department of Western Languages & Literatures **Istanbul, Turkey**
Minor in Film Studies GPA: 3.92/4.00 2017

ACADEMIC EXPERIENCE

Boğaziçi University, [Socio-economic System Dynamics Laboratory](#) 2020-present
Graduate Researcher
Supervisors: Prof. Yaman Barlas, Assoc. Prof. Gönenç Yücel

- Dynamic modeling of chemotherapy-coupled pharmacotherapy for neutropenic patients.
- Research on policy analysis for financial sustainability of contribution-based public health systems against demographic challenges such as aging and increased chronic disease prevalence.

Koç University, [KaranfilLab](#) 2020-present
Teaching Assistant & Research Fellow
Supervisors: Asst. Prof. Özge Karanfil, Asst. Prof. Mahdi Hashemian

- Teaching Assistant for TECH 517 - Strategic Systems Modeling, Fall 2021
- Human subject dynamic decision making (DDM) experiments for evaluation of stakeholder effect on formation of clinical practice guidelines (CPGs) in the context of prostate cancer screening.

RESEARCH INTERESTS

System dynamics	Health systems modeling	Health economics
Agent-based modeling	Biomedical modeling	Insurance dynamics
Systems theory	Evidence-based public health	LGBTQIA+ health
Complex adaptive systems	Health policy	Social determinants of health
Simulation for policy analysis	Dynamic decision-making	Health disparities

AWARDS AND SCHOLARSHIPS

- **Lupina Foundation**, Lupina Young Researchers Award Honorable Mention, International System Dynamics Conference 2020
- **The Scientific and Technological Research Council of Turkey (TUBITAK)** 2210-A National MSc/MA Scholarship, 2020
- **Japan Student Services Organization (JASSO)** Student Scholarship at the University of Tsukuba, 2017-2018

PEER REVIEWED JOURNAL ARTICLES

O. İrsoy, Ş. Güz, N.B. Akan, and G. Yücel, (2021), [Dynamic trade-offs in granulocyte colony-stimulating factor \(G-CSF\) administration during chemotherapy](#). *System Dynamics Review*, 36: 397-446.

- Study presented in *System Dynamics Society Seminar Series: Biomedical System Dynamics Modeling*

CONFERENCE PRESENTATIONS

Ö. Karanfil, Ş. Güz, O. İrsoy, M. Hashemian, (2021), [What is the Stakeholder Effect on Clinical Guideline Formation Process: An Experimental Study](#), *Proceeding of the 39th International Conference of the System Dynamics Society*, Chicago, IL.

- Presented in Parallel Session: Clinical Care Improvement

Ö. Karanfil, Ş. Güz, O. İrsoy, M. Hashemian, (2021), [Stakeholder Effect in The Formation of Policy/Practice Guidelines: An Experimental Study For Medical Screening](#), *Abstracts for the 40th Congress on Operations Research / Industrial Engineering*, Istanbul, Turkey.

- Presented in Parallel session: System Dynamics Applications in Healthcare

Ş. Güz, O. İrsoy, N.B. Akan, and G. Yücel, (2020), [Managing Chemotherapy-Induced Neutropenia using Exogenous Granulocyte Colony-Stimulating Factor](#), *Proceedings of the 38th International Conference of the System Dynamics Society*, Bergen, Norway.

- Presented in Plenary session: Scientific Advances
- Awarded with Lupina Young Researchers Award – *Honorable Mention*

PROFESSIONAL AFFILIATIONS

System Dynamics Society	2020-present
SDS Health Policy Special Interest Group	2021-present

SKILLS (refer to [GitHub](#) for produced materials)

Software: STELLA, STELLA Architect, VensimPLE, VensimDSS, NetLogo, ARENA, MS Office, QGIS, C, C++, R, CMPL, GAMS, SIMAN

Languages: Turkish (Native), English (Proficient), Japanese (Proficient)

RELATED COURSEWORK (w/ instructor & course code, at Boğaziçi University)

Complex Systems Science and Simulation

Dynamics of Socio-Economic Systems	IE 550	Yaman Barlas
Agent Based Modeling & Simulation	IE 588	Gönenç Yücel
Systems and Sustainability	ESC 578	Ali Kerem Sayse
Systems Theory	IE 533	Gönenç Yücel
Systems Science and Engineering	IE 350	Gönenç Yücel
Systems Simulation (DES)	IE 306	Ali Rıza Kaylan

Operations Research and Management

Optimization Techniques I	IE 501	Kuban Altınel
Operations Research I	IE 202	İlhan Or
Operations Research II	IE 305	Hakan Yaşarcan
Facilities Design & Planning	IE 312	Gönenç Yücel
Supply Chain Management	IE 313	Taner Bilgiç
Graph Algorithms & Applications	IE 456	Tınaz Ekim
Stochastic Models in OR	IE 450	Refik Güllü
Strategic Management for Engineers	ENG 582	Lutfi Ensari

Data Science, Statistics and Stochastic Modeling

Statistical Learning for Data Mining	IE 582	Mustafa Baydoğan
Statistical Inference	IE 508	Wolfgang Hörmann
Stochastic Processes and Applications	IE 505	Aybek Korugan
Statistical Forecasting & Time Series	IE 360	Mustafa Baydoğan
Design & Analysis of Experiments	IE 506	Ali Rıza Kaylan
Queuing Systems Analysis & Control	IE 584	Aybek Korugan
Quality Engineering	IE 423	Mustafa Baydoğan

SELECTED PROJECTS (outputs and reports are available at [GitHub](#))

- What's land got to do with it? Exploring the potential of land- based carbon mitigation strategies in Turkey, *System Dynamics project, 2021 (ESC 587)*
- Algorithmic Efficiency of Random Graph Generation Algorithms for Given Degree Sequences, *Graph Theory project, 2020 (IE 456)*
- Dynamic Modelling of Harmful Algal Blooms and an Analysis on Potential Mitigation Strategies, *System Dynamics project, 2020 (IE 550)*
- Prediction of Match Scores in English Premiere League using Data Mining Algorithms, *Data Mining Project, 2019 (IE 582)*
- Analysis of False Information Diffusion under Different Network Topologies and Population Characteristics, *Agent Based Modelling project, 2019 (IE 588)*

INTERNSHIPS

Arçelik-LG

Production Intern

Istanbul
2019

- Assembly line management operations
- Ergonomics design improvement tasks

CoFesta

Youth Ambassador

Tokyo
2017-2018

- Organization and promotion work for large scale events
- Japanese-English translation

Koç Zer Merkezi Hizmetler

Digital Marketing Intern

Istanbul
2017

- Search Engine Optimization (SEO)
- Search Engine Marketing (SEM)
- Google AdWords, Google Analytics

REFERENCES

Dr. Gönenç Yücel

Associate Professor & Department Vice-Chair
Department of Industrial Engineering, Faculty of Engineering
Boğaziçi University, Istanbul
gonenc.yucel@boun.edu.tr

Dr. Özge Karanfil

Assistant Professor & Coordinator of MSc. Program in Global Health
Department of Operations Management and Information Systems, College of Administrative
Sciences and Economics
Koç University, Istanbul
okaranfil@ku.edu.tr

Note: Additional references are available upon request.