TEXAS STATE VITA

I. Academic/Professional Background

A. Name: Sercan Iscan Title: Assistant Professor (PhD)

B. Educational Background

Degree	*Year*	*University*	*Major*	*Thesis/Dissertation*
PhD	*2025*	*Yıldız Technical University*	*Electrical Engineering*	*A new smart energy management algorithm for microgrids connected to electric power distribution systems: a case study of the university campus*
M.S	*2019*	*Yalova University*	*Energy Systems Engineering*	*Creating and modeling the energy management system of metro Istanbul and its evaluation*
B.S.	*2007*	*Kocaeli University*	*Electrical Engineering*	*Analysis of SCADA applications in industrial plants: SCADA system design and implementation for a paint production plant.*

C. University Experience

Position	*University*	*Dates*
Assistant Professor	*Texas State University*	*July 2026 - present*
Assistant Professor of Instruction	*Texas State University*	*January 2025-July 2026*
Coordinator of Energy Management Department	*Bogazici University*	*2018-2024*
Visiting Scholar	*Gedik University*	*2023-2024*
Teaching Assistant	*Yalova University*	*2018*

D. Relevant Professional Experience

Position	*Entity*	*Dates*
Head of Construction Office	*Bogazici University*	*2023-2024*
Energy Manager	*Bogazici University*	*2018-2024*
Head of Survey and Projects Section	*Yalova University*	*2018*
Project and Supervising Engineer	*Yalova University*	*2010-2018*
Electronic component customer engineer	*Crown Vision Co.Ltd.*	*2008*
Project and Supervising Engineer	*AA Group*	*2007*

E. Other Professional Credentials (licensure, certification, etc.)

[1] Schneider Electric –2014

- ISO 50001: Maximizing Energy Efficiency with Proven Standards
- Energy Efficiency Fundamentals
- Measuring and Comparing Energy Performance

[2] J.v.G. Technology GmbH (Erasmus Mobility Program, Full Grant) –2015

- Training on PV Systems Applications

[3] Presidency of the Republic of Turkey, Presidency of Strategy and Budget – 2018

- Training of Higher Education Places Inventory Classification System

[4] Republic of Turkey Ministry of Energy and Natural Resources – 2019

- Certified Energy Manager

[5] AI Business School and Global AI Hub – 2022

- Python for Machine Learning

[6] Czech Technical University in Prague, UCEEB (Erasmus Mobility Program, Full Grant) – 2023

- The program for energy efficiency and sustainable buildings

II. TEACHING

A. Teaching Honors and Awards:

B. Courses Taught:

Texas State University:
EE 4346: Power Electronics
ENGR 3373: Circuits and Devices
EE 7306: Artificial Intelligence in Smart Grids

Gedik University:
Electric Circuits
Electrical Measurement Techniques

C. Directed Student Learning (i.e. theses, dissertations, exit committees, etc.):
ENGR 5399A: Thesis (ongoing)

D. Courses Prepared and Curriculum Development:

E. Teaching Grants and Contracts

1. Funded External Teaching Grants and Contracts:

2. Submitted, but not Funded, External Teaching Grants and Contracts:

3. Funded Internal Teaching Grants and Contracts:

4. Submitted, but not Funded, Internal Teaching Grants and Contracts:

F. Other:

Bogazici University:
Energy Efficiency and Management

G. Teaching Professional Development Activities Attended

III. SCHOLARLY/CREATIVE

A. Works in Print (including works accepted, forthcoming, in press):

1. Books:

a. Scholarly Monographs:

b. Textbooks:

c. Edited Books:

d. Chapters in Books:

e. Creative Books:

2. Articles:

a. Refereed Journal Articles:

[1] E. B. Kaya, S. Aslan, D. Valles, A. K. Dutta and S. Iscan, "Motor Fault Diagnosis Across Variable Power Using Deep Learning," *2025 International Conference on Computer, Information and Telecommunication Systems (CITS)*, Colmar, France, 2025, pp. 1-7, doi: 10.1109/CITS65975.2025.11099471.

[2] Iscan, S., Arikan, O., "Optimizing battery energy storage system for campus micro grid: Economic and environmental benefits of strategic sizing", Journal of Energy Storage,Volume 124, 2025, https://doi.org/10.1016/j.est.2025.116905 .

[3] Vatandaş, S., Seven, İlhan, İşcan, S., & Ünalan, E. (2024). Case Study on Improving the Energy Performance of Existing Buildings Towards Net Zero or Nearly Zero Energy Building Transition. ZeroBuild Journal, 2(02), 139–150. https://doi.org/10.5281/zenodo.13117697

[4] İşçan, S., Arıkan, O. Economic operation of a micro grid structured university campus via optimal diesel generator operation under different strategies: a case study. Electr Eng 106, 4859–4880 (2024). https://doi.org/10.1007/s00202-024-02253-7

[5] S. İşçan & O. Arıkan. Energy management planning according to the electricity tariff models in Turkey: A case study. Turk J Electr Power Energy Syst, 2022; 2(1): 46-57. https://doi.org/10.5152/tepes.2022.22010

[6] İşçan, S., Ünver, Ü., & Güneş, T. (2022). Energy management system for Istanbul urban electric transportation systems: Proposition and evaluation of performance tracking system for traction electric consumption. Journal of the Faculty of Engineering and Architecture of Gazi University, 37(2), 889-906. https://doi.org/10.17341/gazimmfd.786144

b. Non-refereed Articles:

3. Conference Proceedings:

a. Refereed Conference Proceedings:

[1] S. İşçan and O. Arıkan, "Optimal Electricity Tariff Management in the Scope of Energy Management on University Campuses: Boğaziçi University Case Study," 2021 13th International

Conference on Electrical and Electronics Engineering (ELECO), Bursa, Turkey, 2021, pp. 329-333, https://doi.org/10.23919/ELECO54474.2021.9677642
[2] İsçan, S., Ünver, Ü., & Güneş, T. (2019). İstanbul Kent İçi Elektrikli Raylı Ulaşım Sistemlerine Ait Elektrik Enerjisi Tüketimleri İçin Enerji Analizi ve Yönetiminin Yapılması, 4. Uluslararası Mühendislik Mimarlık ve Tasarım Kongresi, İstanbul. ss, 1453.

b. Non-refereed:

4. Abstracts:

5. Reports:

6. Book Reviews:

7. Other Works in Print:

B. Works Not in Print:

1. Papers Presented at Professional Meetings:

2. Invited Talks, Lectures, and Presentations:

[1] Bogazici University Wind Energy Plant Project Presentation (BUWEP) for the IBTIKAR Project, Bogazici University, 05/16/2023
[1] Energy Efficiency and Management, Invited Talks, Bogazici University, 01/16/2023
[2] Role of Energy Manager, Invited Talks, Gedik University, 12/26/2022
[3] Energy Efficiency and Management, Invited Talks, Adıgüzel University, 02/27/2022
[4] ISO 50001 Standard and its Applications Presentation, Yalova University, 05/10/2019

3. Consultancies:

4. Workshops:

[1] Wind Turbines as a Renewable Energy Source Workshop for Elementary Scholl Students, Nun International IB Schools, April 2021

5. Other Works not in Print:

a. Works "submitted" or "under review":

[1] S. Iscan, O. Arikan, S. Aslan, “Comparative Analysis of Optimization Algorithms for Battery Energy Storage System Sizing in Microgrids within Dynamic Carbon Trading Frameworks", Applied Soft Computing, Elsevier, under review.

b. Works "in progress":

[1] S. Iscan, O. Arikan, S. Aslan, *“Performance Evaluation of Hybrid Algorithms for Short-Term Wind Power Production Forecasting”,* in progress.

[2] S. Iscan, O. Arikan, S. Aslan, *"Comprehensive Review on Energy Management Approaches",* in progress.

c. Other Works Not in Print:

C. Grants and Contracts:

1. Funded External Grants and Contracts:

2. Submitted, but not Funded, External Grants and Contracts:

3. Funded Internal Grants and Contracts:

4. Submitted, but not Funded, Internal Grants and Contracts:

D. Fellowships, Awards, Honors:

[1] 2nd Inter-University Energy Efficiency Competition in Turkey, Honorable Mention, 2023.

IV. SERVICE

A. Institutional

1. University:

2. College:

3. Department/School:

B. Professional:
[1] Journal Reviewer: International Journal of Latest Technology in Engineering, Management & Applied Science.
[2] Expert Witness: Legal electrical expert witness in Turk Courts

C. Community:

D. Organization Memberships:
[1] The Chamber of Electrical Engineers

E. Service Honors and Awards:

F. Service Grants and Contracts:

1. Funded External Service Grants and Contracts:

[1] The World Bank, "Project ID: 162762 - Energy Efficiency in Public Buildings Project", Budget: $7.200.000,000, Year: 2024.
[2] The World Bank, "Project ID: SREEPB/WORKS-RET-P01- Seismic Resilience and Energy Efficiency in Public Buildings (SREEPB)", Budget: $5.500.000,000, Year: 2024.

[3] The World Bank, “Project ID: SREEPB/WORKS-RET-P02R- Seismic Resilience and Energy Efficiency in Public Buildings (SREEPB)”, Budget: $3.719.000,000, Year: 2024.

2. Submitted, but not Funded, External Service Grants and Contracts:

3. Funded Internal Service Grants and Contracts:

4. Submitted, but not Funded, Internal Service Grants and Contracts: