

Cukurova University, Faculty of Arts and Sciences
Department of Artificial Intelligence and Machine Learning

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Research Interests

Electric Load Forecasting, Energy Forecasting and Analytics, Electrical Energy and Power Systems, Renewable Energy Systems, and Machine Learning.

Positions

Cukurova University

Department of Artificial Intelligence and Machine Learning

• *Deputy Head of Department* 2026–Present

• *Associate Professor* 2026–Present

Department of Electrical and Electronic Engineering

• *Adjunct Professor* 2023–2026

• *FDP Research Assistant (Secondment)* 2013–2017

AAT¹ Science and Technology University

Department of Electrical and Electronic Engineering

• *Associate Professor* 2026

• *Deputy Head of Department* 2024–2026

• *Assistant Professor* 2021–2026

• *Lecturer* 2019–2021

• *FDP² Research Assistant* 2013–2019

Rolls-Royce Solutions Energy, Marine, and Defence Inc.

• *Service and Commissioning Engineer* 2012–2013

Sanko Textile Trading Co.

• *Electrical Maintenance Engineer* 2012

Turkish Armed Forces

• *Officer Cadet* 2010–2012

Education

Cukurova University

PhD in Electrical and Electronic Engineering 2015–2019

• Title: Research and Application of Real-Time Short-Term Electrical Energy Consumption Forecasting Using Artificial Intelligence-Based Techniques

• Supervisors: Prof. Ahmet Teke and Dr Hatice Basak Ayana

MSc in Electrical and Electronic Engineering

2012–2015

• Title: Developing a Software Program to Determine the Optimal Capacity Rating of Cogeneration and Trigeneration Plants Driven by Gas Engines for Unlicensed Generation of Electricity

• Supervisors: Prof. Ahmet Teke and Prof. Lutfu Saribulut

BSc in Electrical and Electronic Engineering

2004–2010

• Department of Electrical Engineering, Linköping University (Erasmus) 2007–2008

Publications in SCIE and SSCI

1. **Zor, K.**, Ozdemir, A. C., and Cetin Tas, I. A Novel Gene Expression Programming Algorithm for Forecasting Carbon Dioxide Emissions in G7 Countries. *Applied Sciences*, 16(10):4676 2026. DOI: 10.3390/app16104676

¹AAT: Adana Alparslan Turkes

²FDP: Faculty Development Programme

2. Atalay, B. A. and **Zor, K.** An Innovative Approach for Forecasting the Hydroelectricity Generation by Benchmarking Tree-Based Machine Learning Models. *Applied Sciences*, 15(19):10514, 2025. DOI: 10.3390/app151910514
3. Cebeci, C. and **Zor, K.** Electricity Demand Forecasting Using Deep Polynomial Neural Networks and Gene Expression Programming during COVID-19 Pandemic. *Applied Sciences*, 15(5):2843, 2025. DOI: 10.3390/app15052843
4. Tolun, O. C., **Zor, K.**, and Tutsoy, O. A Comprehensive Benchmark of Machine Learning-Based Algorithms for Medium-Term Electric Vehicle Charging Demand Prediction. *Journal of Supercomputing*, 81:475, 2025. DOI: 10.1007/s11227-025-06975-8
5. Ozdemir, A. C., Bulus, K., and **Zor, K.** Medium- to Long-Term Nickel Price Forecasting Using LSTM and GRU Networks. *Resources Policy*, 78:102906, 2022. DOI: 10.1016/j.resourpol.2022.102906
6. Celik, O., **Zor, K.**, Tan, A., and Teke, A. A Novel Gene Expression Programming-Based MPPT Technique for PV Micro-Inverter Applications under Fast-Changing Atmospheric Conditions. *Solar Energy*, 239:268–282, 2022. DOI: 10.1016/j.solener.2022.05.012
7. **Zor, K.**, Celik, O., Timur, O., and Teke, A. Short-Term Building Electrical Energy Consumption Forecasting by Employing Gene Expression Programming and GMDH Networks. *Energies*, 13(5):1102, 2020. DOI: 10.3390/en13051102
8. Teke, A., **Zor, K.**, and Timur, O. A Simple Methodology for Capacity Sizing of Cogeneration and Trigenation Plants in Hospitals: A Case Study for a University Hospital. *Journal of Renewable and Sustainable Energy*, 7(053102):1–15, 2015. DOI: 10.1063/1.4930064

Book Chapters

1. Tolun, G. G., Tolun, O. C., and **Zor, K.** Prosumer Electricity Demand Forecasting Using Artificial Intelligence-based Algorithms Incorporating Meteorological Data. *Engineering Applications of AI for Demand Forecasting*, Boca Raton, CRC Press, 2026. ISBN: 978-1-00354-187-5 DOI: 10.1201/9781003541875-11
2. **Zor, K.** and Celik, O. An Application of Different Approaches to Missing Data for Electric Load Forecasting by Using an Advanced Gene Expression Programming Algorithm. *Advances in Engineering Research*, Nova Science Publishers, New York, 44:223–240, 2021. ISBN: 978-1-53619-950-5

Publications in ESCI and Scopus

1. Tolun, G. G., Tolun, O. C. and **Zor, K.** Forecasting Reactive Power in Electric Distribution Systems by Using Machine Learning-Based Algorithms. *e-Prime - Advances in Electrical Engineering, Electronics and Energy*, 13(2025):101019, 2025. DOI: 10.1016/j.prime.2025.101019
2. Timur, O., **Zor, K.**, Celik, O., Teke, A., and Ibrikci, T. Application of Statistical and Artificial Intelligence Techniques for Medium-Term Electrical Energy Forecasting: A Case Study for a Regional Hospital. *Journal of Sustainable Development of Energy, Water and Environment Systems*, 8:520–536, 2020. DOI: 10.13044/j.sdewes.d7.0306

International Conference Publications

1. Yoruk, A. S. and **Zor, K.** Explainable Machine Learning for Distribution Transformer Load Ratio Forecasting. *8th Global Power, Energy and Communication Conference (GPECOM2026)*, (247):1022-1027, Jun 3–5, 2026. (Naples, Italy) DOI: 10.1109/GPECOM70462.2026.11578502

2. Tolun, O. C., **Zor, K.**, and Tutsoy, O. A State-of-the-Art Review of Machine Learning Approaches for Electricity Theft Detection in Smart Grid. *Digital Proceedings of the 20th Conference on Sustainable Development of Energy, Water and Environment Systems (SDEWES2025)*, (0900):1-26, Oct 5–10, 2025. (Dubrovnik, Croatia)
3. **Zor, K.**, Tolun, G. G., and Şeker Zor, E. Forecasting Electricity Generation of a Geothermal Power Plant Using LSTM and GRU Networks. *7th Global Power, Energy and Communication Conference (GPECOM2025)*, (201):531-536, Jun 11–13, 2025. (Bochum, Germany)
DOI: 10.1109/GPECOM65896.2025.11061839
4. Tolun, O. C., **Zor, K.**, and Tutsoy, O. Short-Term Electric Vehicle Charging Demand Prediction Using Machine Learning-Based Algorithms. *Digital Proceedings of the 1st African Conference on Sustainable Development of Energy, Water and Environment Systems (AFSDEWES2025)*, (0143):1-16, May 27–31, 2025. (Oujda-Saidia, Morocco)
5. Atalay, B. A. and **Zor, K.** Hydroelectric Power Forecasting via Tree-Based Machine Learning Algorithms. *Digital Proceedings of the 19th Conference on Sustainable Development of Energy, Water and Environment Systems (SDEWES2024)*, (0835):1-15, Sep 8–12, 2024. (Rome, Italy)
6. Bozkurt, H., **Zor, K.**, Bulus, K., and Celik, O. Machine Learning-Based Classification for Electricity Theft Detection in Distribution Systems. *Digital Proceedings of the 19th Conference on Sustainable Development of Energy, Water and Environment Systems (SDEWES2024)*, (0858):1-9, Sep 8–12, 2024. (Rome, Italy)
7. Tolun, G. G. and **Zor, K.** Short-Term Reactive Power Forecasting Using Machine Learning-Based Algorithms in Electric Distribution Systems. *Digital Proceedings of the 19th Conference on Sustainable Development of Energy, Water and Environment Systems (SDEWES2024)*, (0546):1-11, Sep 8–12, 2024. (Rome, Italy)
8. Aydin, B., **Zor, K.**, and Disken, G. Very Short-Term Prosumer Electric Load Forecasting Using Deep Learning-Based Techniques. *Proceedings of the 9th International Youth Conference on Energy (IYCE2024)*, Jul 2–6, 2024. (Colmar, France)
DOI: 10.1109/IYCE60333.2024.10634913
9. Tolun, G. G. and **Zor, K.** Very Short-Term Reactive Power Forecasting Using Machine Learning-Based Algorithms. *Proceedings of the 9th International Youth Conference on Energy (IYCE2024)*, Jul 2–6, 2024. (Colmar, France)
DOI: 10.1109/IYCE60333.2024.10634921
10. Aydin, B. and **Zor, K.** A Benchmark of Deep Learning- and Tree-Based Methods for Prosumer Electric Load Forecasting. *Book of Abstracts of the 44th International Symposium on Forecasting (ISF2024)*, (2024):44, Jun 30–Jul 3, 2024. (Dijon, France)
11. **Zor, K.** Prosumer Electric Load Forecasting Using Machine Learning-Based Algorithms. *Book of Abstracts of the 44th International Symposium on Forecasting (ISF2024)*, (2024):5-6, Jun 30–Jul 3, 2024. (Dijon, France)
12. Yorat, E., **Zor, K.**, Ozbek, N. S. and Saribulut, L. Day-Ahead Electricity Price Forecasting Using Artificial Intelligence-Based Algorithms. *2023 International Conference on Innovation and Intelligence for Informatics, Computing, and Technologies (3ICT2023)*, Nov 20–21, 2023. (Sakheer, Bahrain)
DOI: 10.1109/3ICT60104.2023.10391547
13. Tolun, G. G., **Zor, K.**, and Kaplan, Y. A. Daily Global Solar Irradiation Prediction of a University Campus via a Hybrid AI-Based Method. *Digital Proceedings of the 18th Conference on Sustainable Development of Energy, Water and Environment Systems (SDEWES2023)*, (0104):1-14, Sep 24–29, 2023. (Dubrovnik, Croatia)
14. Tolun, O. C., **Zor, K.**, and Tutsoy, O. Electric Vehicle Charging Demand Prediction Using a Novel Machine Learning-Based Technique. *Digital Proceedings of the 18th Conference on Sustainable Development of Energy, Water and Environment Systems (SDEWES2023)*, (0175):1-14, Sep 24–29, 2023. (Dubrovnik, Croatia)

15. **Zor, K.** and Bulus, K. A Benchmark of GRU and LSTM Networks for Short-Term Electric Load Forecasting. *2021 International Conference on Innovation and Intelligence for Informatics, Computing, and Technologies (3ICT2021)*, Sep 29–30, 2021. (Zallaq, Bahrain)
DOI: 10.1109/3ICT53449.2021.9581373
16. **Zor, K.** and Celik, O. Short-Term Nonindustrial Reactive Power Forecasting. *17th International Conference of Young Scientists on Energy and Natural Sciences Issues (CYSENI2021)*, (ISSN: 1822-7554):478–487, Mar 24–28, 2021. (Kaunas, Lithuania)
17. Celik, O. and **Zor, K.** Effects of MPPT Parameters on the Performance of Photovoltaic Inverters. *17th International Conference of Young Scientists on Energy and Natural Sciences Issues (CYSENI2021)*, (ISSN: 1822-7554):72–81, Mar 24–28, 2021. (Kaunas, Lithuania)
18. Cetin Tas, I. and **Zor, K.** A Prediction of Building Electrical Energy Demand by Using ANN and SVM. *17th International Conference of Young Scientists on Energy and Natural Sciences Issues (CYSENI2021)*, (ISSN: 1822-7554):381–389, Mar 24–28, 2021. (Kaunas, Lithuania)
19. **Zor, K.**, Timur, O., Celik, O., Yildirim, H. B., and Teke, A. Very Short-Term Electrical Energy Consumption Forecasting of a Household for the Integration of Smart Grids. *Official Conference Proceedings of the European Conference on Sustainability, Energy & the Environment 2018 (ECSEE2018)*, (ISSN: 2188-1146):1–14, Jul 6–7, 2018. (Brighton, UK)
20. Celik, O., Tan, A., **Zor, K.**, and Teke, A. Optimal Design and Analysis of Single-Stage Flyback PV Micro-Inverter. *Official Conference Proceedings of the European Conference on Sustainability, Energy & the Environment 2018 (ECSEE2018)*, (ISSN: 2188-1146):103–115, Jul 6–7, 2018. (Brighton, UK)
21. Timur, O., **Zor, K.**, Celik, O., and Teke, A. Very Short-Term Internet of Things Based Forecasting of Air Conditioning Loads: A Case Study for a Server Room in a Hospital. *Proceedings of the 2nd International Conference on Theoretical and Applied Computer Science and Engineering (ICTACSE2018)*, (ISBN:978-605-9546-12-6):22–25, Jun 29–30, 2018. (Istanbul, Türkiye)
22. Timur, O., **Zor, K.**, Celik, O., and Teke, A. Development of an Intelligent Energy Measurement Device for Buildings. *Proceedings of the 2nd International Conference on Theoretical and Applied Computer Science and Engineering (ICTACSE2018)*, (ISBN:978-605-9546-12-6):16–21, Jun 29–30, 2018. (Istanbul, Türkiye)
23. **Zor, K.**, Celik, O., Timur, O., Yildirim, H. B., and Teke, A. Simple Approaches to Missing Data for Energy Forecasting Applications. *Proceedings of the 16th International Conference on Clean Energy (ICCE2018)*, (FORC-03):1–4, May 9–11, 2018. (Gazimağusa, Turkish Republic of Northern Cyprus)
24. **Zor, K.**, Timur, O., Celik, O., Yildirim, H. B., and Teke, A. Interpretation of Error Calculation Methods in the Context of Energy Forecasting. *Digital Proceedings of the 12th Conference on Sustainable Development of Energy, Water and Environment Systems (SDEWES2017)*, (0722):1–9, Oct 4–8, 2017. (Dubrovnik, Croatia)
25. Timur, O., **Zor, K.**, Celik, O., Yildirim, H. B., and Teke, A. Design and Implementation of Smart Energy Measurement Plug in Smart Buildings. *Digital Proceedings of the 12th Conference on Sustainable Development of Energy, Water and Environment Systems (SDEWES2017)*, (0732):1–12, Oct 4–8, 2017. (Dubrovnik, Croatia)
26. Celik, O., Tan, A., **Zor, K.**, Timur, O., Yildirim, H. B., and Teke, A. Comparative Investigation of Single-Stage and Multi-Stage Grid-Tie Micro-Inverters. *Digital Proceedings of the 12th Conference on Sustainable Development of Energy, Water and Environment Systems (SDEWES2017)*, (0735):1–6, Oct 4–8, 2017. (Dubrovnik, Croatia)
27. **Zor, K.**, Timur, O., and Teke, A. A State-of-the-Art Review of Artificial Intelligence Techniques for Short-Term Electric Load Forecasting. *Proceedings of the 6th International Youth Conference on Energy (IYCE2017)*, 1–6, Jun 21–24, 2017. (Budapest, Hungary)
DOI: 10.1109/IYCE.2017.8003734

28. **Zor, K.**, Celik, O., and Teke, A. Techno-Economic Analysis of a Grid-Connected Hybrid Biogas/Photovoltaic Power Generation System in the Mediterranean Region. *Official Conference Proceedings of the European Conference on Sustainability, Energy & the Environment 2016 (ECSEE2016)*, (ISSN: 2188-1146):1–10, Jul 7–10, 2016. (Brighton, UK)
29. **Zor, K.**, Teke, A., and Timur, O. Developing a Software Program to Determine the Optimal Capacity Rating of Gas Engine Based Cogeneration and Trigeration Plants for Unlicensed Generation of Electricity. *Digital Proceedings of the 10th Conference on Sustainable Development of Energy, Water and Environment Systems (SDEWES2015)*, (0695):1–12, Sep 27–Oct 2, 2015. (Dubrovnik, Croatia)
30. **Zor, K.** and Teke, A. Onsite Energy Production with Cogeneration Plants Driven by Reciprocating Gas Engines. *Digital Proceedings of the 1st South East European Conference on Sustainable Development of Energy, Water and Environment Systems (SEE SDEWES 2014)*, (0237):1–9, Jun 29–Jul 3, 2014. (Ohrid, North Macedonia)

Other Journal Publications

1. Tolun, O. C., **Zor, K.**, and Tutsoy, O. Application of Advanced Machine Learning Methods for Electricity Theft Detection in Smart Grids. *Cukurova University Journal of the Faculty of Engineering*, 40(3):627–641, 2025.
DOI: [10.21605/cukurovaumfd.1772073](https://doi.org/10.21605/cukurovaumfd.1772073)
2. Atalay, B. A. and **Zor, K.** Hydroelectric Power Forecasting via XGBoost (Extreme Gradient Boosted Decision Trees). *Cukurova University Journal of the Faculty of Engineering*, 40(1):205–218, 2025.
DOI: [10.21605/cukurovaumfd.1666062](https://doi.org/10.21605/cukurovaumfd.1666062)
3. Timur, O., **Zor, K.**, Celik, O., and Teke, A. Enhancement of a Low-Cost Intelligent Device for Improving Energy Efficiency in Buildings. *Communications Faculty of Sciences University of Ankara Series A2–A3: Physical Sciences and Engineering*, 60(2):103–128, Nov 2018.
4. Teke, A., Timur, O., and **Zor, K.** Calculating Payback Periods for Energy Efficiency Improvement Applications at a University Hospital. *Cukurova University Journal of the Faculty of Engineering and Architecture*, 30(1):41–56, Jun 2015.
DOI: [10.21605/cukurovaummfd.242803](https://doi.org/10.21605/cukurovaummfd.242803)

Other Conference Publications

1. Tolun, G. G., Tolun, O. C., and **Zor, K.** An Application of Prosumer Electric Load Forecasting with Machine Learning-Based Algorithms. *National Conference on Electrical, Electronic, and Biomedical Engineering (ELECO2024)*, Nov 28–30, 2024. (Bursa, Türkiye)
DOI: [10.1109/ELECO64362.2024.10847126](https://doi.org/10.1109/ELECO64362.2024.10847126)
2. Buluş, K. and **Zor, K.** A Hybrid Deep Learning Algorithm for Short-Term Electric Load Forecasting. *The 29th IEEE Conference on Signal Processing and Communications Applications (SIU2021)*, 9–11 Jun 2021. (Istanbul, Türkiye)
DOI: [10.1109/SIU53274.2021.9477869](https://doi.org/10.1109/SIU53274.2021.9477869)
3. **Zor, K.**, Teke, A., Celik, O., and Latran, M. B. Türkiye’de Gaz Motorlu Kojenerasyon ve Trijenerasyon Santralleri ile Elektrik Enerjisi Üretimi. *IV. Elektrik Tesisat Ulusal Kongre ve Sergisi*, (612):189–195, Oct 21–24, 2015. (Izmir, Türkiye)
4. Latran, M. B., Teke, A., and **Zor, K.** Akıllı Eviriciler ile Yenilenebilir Enerji Tabanlı Dağıtık Üretim Sistemlerinin Akıllı Şebekelere Entegrasyonu. *IV. Elektrik Tesisat Ulusal Kongre ve Sergisi*, (612):246–255, Oct 21–24, 2015. (Izmir, Türkiye)
5. **Zor, K.**, Teke, A., and Tümay, M. Biyokütle ve Katı Atıkların Yakıt Olarak Kullanıldığı Gaz Motorlu Kojenerasyon Santralleri ile Yenilenebilir Enerji Üretimi. *VIII. Yenilenebilir Enerji Kaynakları Sempozyumu (YEKSEM 2015)*, (610):91–95, Oct 15–16, 2015. (Adana, Türkiye)
6. **Zor, K.** and Teke, A. Current Status and Operation Modes of Cogeneration and Trigeration Plants Driven by Gas Engines. *Proceedings of the 21st International Energy and Environment Fair and Conference (ICCI 2015)*, 91–94, May 6–8, 2015. (Istanbul, Türkiye)

Projects**International Projects**

- PyPSA³ Project, [PyPSA meets Africa and PyPSA Earth](#), **Western Asia Coordinator**, 2021–2022.

TUBITAK⁴ Projects

- Developing a Software to Determine the Optimum Capacity Rating for Unlicensed Electricity Generation in Cogeneration and Trigeneration Power Plants Driven by Gas Engines. TUBITAK 3001 Project, Grant Number: 113E769, **Scholar**, 14 Month, Project Budget: ₺32,764.77, 2014–2015.

Scientific Research Projects

- Research and Development of Very Short-Term Electric Load Forecasting Models Using Machine Learning-Based Algorithms for Prosumers. Individual Research Project, Adana Alparslan Turkes Science and Technology University, **Supervisor**, 12 Month, Grant Number: 24103005, Project Budget: ₺65,000.00, 2024–2025.
- Detection of Non-Technical Losses in Electric Distribution System by Using Data Analytics and Machine Learning Methods. Individual Research Project, Adana Alparslan Turkes Science and Technology University, **Supervisor**, 24 Month, Grant Number: 21103013, Project Budget: ₺20,000.00, 2021–2023.
- Implementation of Short-Term Reactive Power Forecasting Using Artificial Intelligence-Based Techniques for a Nonindustrial Large Building Complex. Individual Research Project, Adana Alparslan Turkes Science and Technology University, **Supervisor**, 13 Month, Grant Number: 19103012, Project Budget: ₺25,000.00, 2019–2021.
- Electric Demand Prediction: Data Acquisition, Implementation of ANN and User Interface Design. Individual Research Project, Cukurova University, **Researcher**, 24 Month, Grant Number: FBA-2017-8252, Project Budget: ₺25,990.07, 2017–2019.
- Very Short-Term Forecasting of a Household Electrical Energy Consumption. Individual Research Project, Cukurova University, **Researcher**, 12 Month, Grant Number: FBA-2017-9344, Project Budget: ₺11,999.99, 2017–2018.
- Developing a Software to Determine the Optimum Capacity Rating of Cogeneration and Trigeneration Plants Driven by Gas Engines. Scientific Research Project, Cukurova University, **Researcher**, 12 Month, Grant Number: FYL-2014-2351, Project Budget: ₺5,948.01, 2014–2015.

Grants**TUBITAK 2224-A Grant (\$3,000)**

- [IEEE 7th Global Power, Energy and Communication Conference \(Bochum, Germany\)](#) 2025
- [The 44th International Symposium on Forecasting \(Dijon, France\)](#) 2024

Erasmus+ Staff Mobility Grant (€4,255)

- Subject: EVs⁵, Host: [Assoc. Prof. Ercan Avsar](#) from [Technical University of Denmark](#) (Lyngby, Denmark) 2026
- Subject: Microgrids, Host: [Prof. Juan C. Vasquez](#) from [Aalborg University](#) (Aalborg, Denmark) 2023
- Subject: Electric Load Forecasting, Host: [Prof. Jethro Browell](#) from [University of Strathclyde](#) (Glasgow, UK) 2018

TUBITAK Scholarship (₺5,630)

2014–2015

- Project Number: EEEAG-113E769

Erasmus Student Exchange Grant (€3,000)

2007–2008

- [Department of Electrical Engineering](#), [Linköping Institute of Technology](#), [Linköping University](#), Linköping, Sweden

Managed Theses**Supervisions**

1. Atalay, B. A. *Basin-Based Hierarchical Hydroelectric Power Forecasting*. PhD Thesis, Department of Electrical and Electronic Engineering, Institute of Graduate School, Adana Alparslan Turkes Science and Technology University, 2028. (Adana, Türkiye)
2. Tolun, G. G. *Short-Term Reactive Power Forecasting Using Artificial Intelligence-Based Techniques*. PhD Thesis, Department of Electrical and Electronic Engineering, Institute of Graduate School, Adana Alparslan Turkes Science and Technology University, 2028. (Adana, Türkiye)

³PyPSA: Python for Power System Analysis

⁴TUBITAK: The Scientific and Technological Research Council of Türkiye

⁵Machine Learning-Based Forecasting Strategies for Electric Vehicles

3. Atalay, B. A. *Hydroelectric Power Forecasting via Tree-Based Machine Learning Algorithms*. MSc Thesis, Department of Electrical and Electronic Engineering, Institute of Graduate School, Adana Alparslan Turkes Science and Technology University, 2024. (Adana, Türkiye)

Co-Supervisions

1. Tolun, O. C. *Electricity Theft Detection in Distribution Systems Using Machine Learning-Based Algorithms*. PhD Thesis, Department of Electrical and Electronic Engineering, Institute of Graduate School, Adana Alparslan Turkes Science and Technology University, 2027. (Adana, Türkiye)
2. Abdalla, E. *Deep Learning-Based Daily Solar Irradiation Prediction for Adana Region*. MSc Thesis, Department of Electrical and Electronic Engineering, Institute of Natural and Applied Sciences, Cukurova University, 2023. (Adana, Türkiye)

Memberships	The International Institute of Forecasters (IIF), Member	2023–Present
	• Early Career Forecasters (ECF) • Section on Water, Energy and Environment (SWEET)	
	IEEE, Member	2007–Present
	• IEEE Power and Energy Society (PES) • IEEE Computational Intelligence Society (CIS)	
	UCTEA ⁶ Chamber of Electrical Engineers, Member, Adana	2010–2021
Courses Taught	Cukurova University	2023–Present
	2026-2027 Autumn Term	
	• YZZXXX Differential Equations	Bachelor
	• YZZXXX Introduction to Data Mining	Bachelor
	• YZZXXX Probability and Statistics	Bachelor
	2025-2026 Spring Term	
	• OMY104 ⁷ Temel Elektrik ve Elektronik	Bachelor
	2025-2026 Autumn Term	
	• EEE113 Introduction to Electrical Engineering	Bachelor
	• EEE203 Complex Calculus	Bachelor
Courses Taught	2024-2025 Autumn Term	
	• EEE113 Introduction to Electrical Engineering	Bachelor
	2023-2024 Autumn Term	
	• EEE113 Introduction to Electrical Engineering	Bachelor
	AAT Science and Technology University	2019–Present
	2026-2027 Autumn Term	
	• EEE483 Introduction to Energy Analytics	Bachelor
	• EEE-U8000 Special Area Course	Doctoral
	2025-2026 Spring Term	
	• EEE110 Computer Programming	Bachelor
	• EEE356 Data Analytics	Bachelor
	• EEE497 Graduation Project I	Bachelor
	• EEE-U7000 Special Area Course	Masters
	• EEE7019 Pattern Recognition	Masters
	• EEE7200 CCHP Systems	Masters
	• EEE-U8000 Special Area Course	Doctoral
	2025-2026 Autumn Term	

⁶UCTEA: Union of Chambers of Turkish Engineers and Architects

⁷OMY: Department of Automotive Engineering

• EEE110 Computer Programming	Bachelor
• EEE407 Renewable Energy	Bachelor
• EEE497 Graduation Project I	Bachelor
• EEE-U7000 Special Area Course	Masters
• EEE7195 Python for Data Science	Masters
• EEE7199 Energy Analytics	Masters
• EEE-U8000 Special Area Course	Doctoral
• EEE8025 Statistical Machine Learning	Doctoral

2024-2025 Spring Term

• EEE110 Computer Programming	Bachelor
• EEE356 Data Analytics	Bachelor
• EEE435 Machine Learning	Bachelor
• EEE498 Graduation Project II	Bachelor
• EEE-U7000 Special Area Course	Masters
• EEE7200 CCHP Systems	Masters
• EEE-U8000 Special Area Course	Doctoral
• EEE8025 Statistical Machine Learning	Doctoral

2024-2025 Autumn Term

• EEE407 Renewable Energy	Bachelor
• EEE497 Graduation Project I	Bachelor
• EEE-U7000 Special Area Course	Masters
• EEE7195 Python for Data Science	Masters
• EEE7199 Energy Analytics	Masters
• EEE-U8000 Special Area Course	Doctoral
• EEE8188 Renewables in Electricity Markets	Doctoral
• EEE8189 Digitalisation of Energy Systems	Doctoral

2023-2024 Spring Term

• EEE356 Data Analytics	Bachelor
• EEE407 Renewable Energy	Bachelor
• EEE423 Embedded Systems	Bachelor
• EEE481 Graduation Project I	Bachelor
• EEE482 Graduation Project II	Bachelor
• EEE483 Introduction to Energy Analytics	Bachelor
• EEE-U7000 Special Area Course	Masters
• EEE7196 Sustainable Energy	Masters
• EEE7200 CCHP Systems	Masters
• EEE8183 Energy Informatics	Doctoral

2023-2024 Autumn Term

• EEE407 Renewable Energy	Bachelor
• EEE423 Embedded Systems	Bachelor
• EEE481 Graduation Project I	Bachelor
• EEE-U7000 Special Area Course	Masters
• EEE7195 Python for Data Science	Masters
• EEE7199 Energy Analytics	Masters
• EEE8189 Digitalisation of Energy Systems	Doctoral

2022-2023 Spring Term

• EEE110 Computer Programming	Bachelor
• EEE208&ESE208 ⁸ Circuit Theory II	Bachelor
• EEE222&ESE222 Electrical Circuits Lab II	Bachelor
• EEE356 Data Analytics	Bachelor
• EEE-U7000 Special Area Course	Masters
• EEE7196 Sustainable Energy	Masters

⁸ESE: Department of Energy Systems Engineering

• EEE7200 CCHP Systems	Masters
• EEE8182 Electric Load Forecasting	Doctoral
• EEE8183 Energy Informatics	Doctoral

2022-2023 Autumn Term

• EEE225 Engineering Mathematics I	Bachelor
• EEE407 Renewable Energy	Bachelor
• ESE305 Energy Transmission and Distribution	Bachelor
• ESE313 Energy Efficiency	Bachelor
• EEE-U7000 Special Area Course	Masters
• EEE7195 Python for Data Science	Masters
• EEE7199 Energy Analytics	Masters
• EEE8183 Energy Informatics	Doctoral

2021-2022 Spring Term

• EEE110 Computer Programming	Bachelor
• EEE453 Electrical Transmission and Distribution	Bachelor
• EEE482 Graduation Project	Bachelor
• EEE483 Introduction to Energy Analytics	Bachelor
• EEE-U7000 Special Area Course	Masters
• EEE7195 Python for Data Science	Masters
• EEE7196 Sustainable Energy	Masters

2021-2022 Autumn Term

• EEE225 Engineering Mathematics I	Bachelor
• EEE407 Renewable Energy	Bachelor
• EEE481 Graduation Project I	Bachelor
• EEE-U7000 Special Area Course	Masters
• EEE7195 Python for Data Science	Masters
• EEE7196 Sustainable Energy	Masters

2020-2021 Spring Term

• EEE110 Computer Programming	Bachelor
• EEE356 Data Analytics	Bachelor

2020-2021 Autumn Term

• EEE105 Introduction to Computer Programming I	Bachelor
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2019-2020 Spring Term

• EEE110 Computer Programming	Bachelor
• EEE407 Renewable Energy	Bachelor
• EEE453 Electrical Transmission and Distribution	Bachelor
• EEE482 Graduation Project	Bachelor