Curriculum Vitae

Personal & contact information: Full name: Cavit Fatih Küçüktezcan
Date and place of birth: 1983, Germany
E-mail: cavitfatih.kucuktezcan@eng.bau.edu.tr

Education:

Doctorate: ITU, Institute of Science & Technology, Electrical Engineering, 2015.
Dynamic security enhancement of power systems via population based optimization methods integrated with artificial neural networks

Master: ITU, Institute of Science & Technology, Electrical Engineering, 2008.
Effects of GA optimized fuzzy power system stabilizers on angle stability of power systems

Bachelor: ITU, Faculty of Electrical and Electronics, Electrical Engineering, 2005.

High School: Şişli Terakki High School, June, 2001.

Experience:

Jan. 2017 - ... : Bahçeşehir University, Department of Electrical & Electronics Engineering, *Assistant Professor*

Dec. 2014 - Dec. 2016 : TUBITAK 1001 Research Project, *Research Scholar*

Dec. 2005 - Feb. 2015 : ITU, Department of Electrical Engineering, *Research Assistant*

Feb. 2013 - Aug. 2013 : University of Duisburg-Essen, Department of Electrical Engineering & Information Technologies, *Visiting Scholar*

Aug. 2008 - Aug. 2009 : TSK Rehabilitation Center, *Electrical Engineer*

Aug. 2004 - Oct. 2004 : Philips Lighting, *Intern*

July 2003 - Aug. 2003 : Sismik Building Audit, *Intern*

Research areas:

Power system dynamics, security, stability and control
Optimization and data mining applications in smart grids and power systems
Forecasting of power generation of renewable energy based power plants and power demand of loads

Research projects:

TUBITAK 1001 (Project #: 114E157), *Dynamic Security Assessment and Enhancement of Power Systems via Population Based Optimization Methods and Machine Learning Tools,* Research Scholar

Grants:

TUBITAK 2214, Abroad research scholarship

Supervised thesis (MSc):

1- Murat Ozan Çelebi, *Static security assessment of power systems via decision trees*, 2022
2- Alper Ünal, *Forecasting of renewable power generation in European markets via long short-term memory neural networks*, 2022
3- Diman Hassan, *Optimal generation rescheduling for congestion management in power systems*, 2021
4- Alireza Yazdi, *Short-Term and Medium-Term Wind Speed Forecasting via Adaptive Neuro-Fuzzy Inference Systems,* 2019
5- Usman Khan, *Short-Term Load Forecasting by Using Artificial Neural Networks,* 2018

Given lectures:

Circuit Theory I (Undergraduate, 4 semesters)
Circuit Theory II (Undergraduate, 4 semesters)
Fundamentals of Electrical Engineering (Undergraduate, 4 semesters)
Electromechanical Energy Conversion (Undergraduate, 7 semesters)
Power Electronics (Undergraduate, 4 semesters)
Electronic Circuit Components (Undergraduate, 1 semester)
Capstone Project (Undergraduate, 10 semesters)
Engineering Mathematics (Graduate, 3 semesters)

Recent duties:	Department Head, Department of Electrical & Electronics Eng. (2019 - …) Coordinator of Master's & Doctoral Programs, Department of Electrical & Electronics Eng. (2017 - …) Accreditation Coordinator, Department of Electrical & Electronics Eng. (2018 – 2020) Credit Transfer Coordinator, Department of Electrical & Electronics Eng. (2017 – 2019)
Memberships:	IEEE (Vice Chair of IEEE PES Turkey Chapter, 2017-2018) Turkish Chamber of Electrical Engineers
Conference committees:	IEEE PES GT&D 2023, Organizing Committee IEEE PES ISGT Europe 2014, Organizing Committee ICSG 2016, Science Committee
Foreign languages:	English (YÖDİL 2021 score: 87.5), German (Beginner)
Programming languages:	Matlab, Phyton, Visual Basic, PLC, HTML
Personal interests:	Guitar, photography, chess, snooker.

Research outputs

Scopus:	https://www.scopus.com/authid/detail.uri?authorId=52663619100 H-index: 4, number of citations: 52

International peer-reviewed journal articles (SCOPUS):

C.F. Kucuktezcan, V.M.I. Genc, O.K. Erol, "Preventive and Corrective Control Actions via Heuristic Optimization Methods with Consecutive Search Space Reduction", Electric Power Components and Systems, 47(1-2), pp. 90-100, 2019. Doi: 10.1080/15325008.2019.1575933 (SCOPUS Q3)

C.F. Kucuktezcan, V.M.I. Genc, "Mean-Variance Mapping Optimization for the Dynamic Security Enhancement of Power Systems", *Turkish Journal of Electrical Engineering & Computer Sciences,* 25(4), pp. 3188-3200, 2017. Doi: 10.3906/elk-1608-147 (SCOPUS Q3)

C.F. Kucuktezcan, V.M.I. Genc, "Preventive and Corrective Control Applications in Power Systems via Big Bang-Big Crunch Optimization", *International Journal of Electrical Power & Energy Systems,* 67, pp. 114-124, 2015. doi: 10.1016/j.ijepes.2015.11.022 (SCOPUS Q1)

C.F. Kucuktezcan, V.M.I. Genc, "A New Dynamic Security Enhancement Method via Genetic Algorithms Integrated with Neural Network Based Tools", *Electric Power Systems Research*, 83(1), pp.1-8, 2012. Doi: 10.1016/j.epsr.2011.09.004 (SCOPUS Q1)

National peer-reviewed journal articles:

P. Beyranvand, **C.F. Kucuktezcan**, Z. Cataltepe, V.M.I. Genc, "A Novel Feature Selection Method for the Dynamic Security Assessment of Power Systems Based on Multi-Layer Perceptrons", *International Journal of Intelligent Systems and Applications in Engineering*, 6(1), pp. 53-58, 2018. (DERGİPARK)

B.E. Turkay, **F. Kucuktezcan**, A. Bulut, "Optimization of Inter-Area Transfer Capability on Power Systems", *EMO Scientific Journal*, pp. 31-39, 2011. (DERGİPARK)

V.M.I. Genc, **C.F. Kucuktezan**, M. Mahdi, "Elektrik Güç Sistemlerinin Geçici Hal Kararlılığı için Önleyici ve Düzeltici Kontrol Sistemleri" *3eelectrotech*, pp. 16-22, 2018.

International conference papers (SCOPUS):

C.F. Kucuktezcan, V.M.I. Genc, O.K. Erol "An Optimization Method for Preventive Control Using Differential Evolution with Consecutive Search Space Reduction", *IEEE PES Conference on Innovative Smart Grid Technologies (ISGT) Europe*, Ljubljana, Slovenia, 2016.

C.F. Kucuktezcan, V.M.I. Genc, "A Comparison between ANN Based Methods of Critical Clearing Time Estimation", *8th International Conference on Electrical and Electronics Engineering (ELECO),* Bursa, Turkey, 2013.

C.F. Kucuktezcan, V.M.I. Genc, "Big Bang-Big Crunch Based Optimal Preventive Control Action on Power Systems", *IEEE PES Conference on Innovative Smart Grid Technologies (ISGT) Europe*, Berlin, Germany, 2012.

C.F. Kucuktezcan, V.M.I. Genc, "Optimal Load Shedding Scheme in Power Systems Based on Big Bang Big Crunch Method", *International Conference on Power and Energy Systems and Applications*, Pittsburgh, USA, 2011.

C.F. Kucuktezcan, V.M.I. Genc, "Dynamic Security Assessment of a Power System Based on Probabilistic Neural Networks", *IEEE PES Conference on Innovative Smart Grid Technologies (ISGT) Europe*, Goteborg, Sweden, 2010.