

## Dr. Oğuzhan Ceylan

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B225, Fatih  
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### Kişisel Bilgiler

*Doğum Tarihi:* 18/10/1977  
*Doğum Yeri:* Ankara / Türkiye  
*Uyruk:* Türkiye  
*Medeni Durum:* Evli

### Araştırma İlgi Alanları

elektrik güç sistemlerinin benzetimi, elektrik dağıtım sistemleri, akıllı şebekeler, dağıtık enerji kaynaklarının etkileri (pv panelleri, elektrikli araçlar, vb.) akıllı yöntemler, sayısal eniyileme, sayısal yöntemler, paralel hesaplama, veri madenciliği teknikleri, görüntü işleme

### Eğitim

- *Doktora:* İTÜ, Bilişim Enstitüsü, Hesaplamalı Bilim ve Mühendislik Programı (PhD 2003-2012).
- *Yüksek Lisans:* İTÜ, Bilişim Enstitüsü, Hesaplamalı Bilim ve Mühendislik Programı M.Sc., 2003.
- *Lisans:* İTÜ, Elektrik-Elektronik Fakültesi, Elektrik Mühendisliği Programı, 2000.

### Akademik Deneyim

- *Yardımcı Doçent*  
Eylül 2017-  
Kadir Has Üniversitesi, Yönetim Bilişim Sistemleri Bölümü, İşletme Fakültesi
- *Konuk Araştırmacı*, Newton-Katip Çelebi Bursu, Brunel Üniversitesi, Londra, Temmuz-Ağustos 2017.
- *Yardımcı Doçent*  
Eylül 2015-2017  
İstanbul Kemerburgaz Üniversitesi, Elektrik-Elektronik Mühendisliği Bölümü.
- *Araştırmacı*  
Eylül 2014-Eylül 2015  
University of Tennessee, Knoxville, ABD  
Oak Ridge National Lab, Microgrid projesinde araştırmacı.
- *Doktora Sonrası Araştırmacı*  
Tübitak Doktora Sonrası Araştırma Bursu, Eylül 2013-Eylül 2014  
University of Tennessee, Knoxville, ABD  
Prof. Dr. Kevin Tomsovic ile çalışma.
- *Lisansüstü Öğrenci*  
İTÜ  
Doktora, yüksek lisans seviye dersler ve araştırma.
- IEEE CIS 19. Jyvaskyla Yaz Okulu Bursu,

- Leonardo Da Vinci Bursu, Digsilent GMBH, Gomaringen, Almanya, 31/08/2005-01/03/2006.
- Konuk Arařtırmacı, Digsilent GMBH, Gomaringen, Almanya, 15/03/2006-31/07/2006.

### Projeler/Burslar

- Newton Katip elebi Fonu alıřtayidüzenleme desteęi Dr. Ioana Pisica (Brunel University) ile beraber, “Intelligent Infrastructures for Sustaniable and Resilient Future Energy Systems” held in İstanbul Kemerburgaz University, Mayıs 24-27, 2017
- Newton Katip elebi Fonu, Seyahat Bursu, (Brunel University) Temmuz-Aęustos 2017.
- Oak Ridge National Lab'deki “Complete Systems-Level Efficient and Interoperable Solution for Microgrid Solutions (CEISMIC)” projesinde Eylül 2014 ile Eylül 2015 arası arařtırmacı.

### Ders Deneyimi

- Yardımcı Doęent Dr. 2017, Kadir Has University, Verilmekte olan dersler:
  - Cloud Computing
  - Database Design and Management
- Yardımcı Doęent Dr., 2015-2017, Altınbaş University (İstanbul Kemerburgaz University), Verilen dersler (2016-2017 bahar):
  - Power Distribution Systems
  - Electromechanical Energy Conversion
  - Power Systems Operation and Control (Lisansüstü)
- Verilen dersler (2016-2017 güz):
  - Power Transmission Systems
  - Microprocessors
  - Intelligent Optimization Methods (Lisansüstü)
- Verilen dersler (2015-2016 bahar):
  - Power Transmission Systems
  - Electromechanical Energy Conversion
  - Power Electronics
- Verilen dersler (2015-2016 güz):
  - Power Distribution Systems
  - Electronics I
- Arařtırma Görevlisi, İTÜ, Biliřim Enstitüsü Aęustos, 2001 - 2012
- Yardım edilen bazı dersler,
  - Introduction to Scientific Computing Tools
  - Introduction to Computers
  - Scientific Computing
  - C Programming
  - Numerical Methods (Using Matlab)
  - Parallel Numerical Algorithms and Tools
  - Web Programming (Php and Mysql)
  - Power Transmission Systems

**Bilgisayar Becerisi** Unix/Linux, OpenDSS, Labview  
Matlab, C, Unix shell scripting, PHP, MPI, OpenMP.  
Gnuplot, PovRay, MySQL, Octave, TeX, LaTeX.

### İş Durumu

- *Araştırma Görevlisi*  
İTÜ, Bilişim Enstitüsü, Şubat, 2001-2012
- *Veri Analisti*  
Kantar Media Aralık 2012– Haziran 2013
- *Doktora Sonrası Araştırmacı*  
University of Tennessee, Eylül 2013– Eylül 2014
- *Araştırmacı*  
University of Tennessee/Oak Ridge National Lab, Eylül 2014- Eylül 2015,
- *Yardımcı Doçent*  
Istanbul Kemerburgaz Üniversitesi, Eylül 2015,2017  
FBE, Müdür Yardımcısı Ağustos 2016-2017
- *Yardımcı Doçent*  
Kadir Has Üniversitesi, Eylül 2017,-

### Komite

#### Üyelikleri/Hakemlikler

- UPEC (Universities Power Engineering Conference) yürütme kurulu üyesi
- International Symposium on Industrial Electronics, INDEL, Program Komite Üyesi.
- Electric Power Systems Research hakemi
- Electric Power Components and Systems hakemi
- Electrical Engineering (Archiv für Electrotechnik) hakemi
- ElectricTurkish Journal of Electrical Engineering and Computer Sciences hakemi
- ElectricIEEE PES General Meeting 2016 and 2017 hakemi.

### Makalelelr (SCI)

- Ritam Misra, Sumit Paudyal, Oğuzhan Ceylan, Paras Mandal and Bishnu P. Bhattarai, Harmonic distortion minimization in power grids with wind and electric vehicles, *Energies*, 2017, 10(7), 932, DOI: 10.3390/en10070932
- Oğuzhan Ceylan, Guodong Liu, Kevin Tomsovic, Coordinated distribution network control of tap changer transformers, capacitors and pv inverters, *Electrical Engineering*, 2017, pp. 1-14, DOI: 10.1007/s00202-017-0563-x
- Oğuzhan Ceylan, Hasan Dağ, Aydoğan Özdemir, Heuristic methods for post outage voltage magnitude calculations, *Turkish Journal of Electrical Engineering and Computer Sciences*, 24, (2016), 105-120 DOI: 10.3906/elk-1301-124
- Oğuzhan Ceylan, Hasan Dağ, Aydoğan Özdemir, Double branch outage modeling and simulation: bounded network approach, *International Journal of Electrical Power and Energy Systems (Elsevier)*, Vol 73, December 2015 pp. 369-376 DOI: 10.1016/j.ijepes.2015.05.001
- Oğuzhan Ceylan, Hasan Dağ, Aydoğan Özdemir, Branch Outage Simulation Based Contingency Screening by Gravitational Search Algorithm, *International Review of Electrical Engineering (I.R.E.E)*, Vol 7, N. 1, January-February 2012, pp. 3370-3377.

## Makaleler (diğerleri)

- Oğuzhan Ceylan, Michael Starke, Phil Irminger, Ben Ollis, Dan King, Kevin Tomsovic, Hourly day ahead solar irradiance forecasting model in Labview using cloud cover data, IU-Journal of Electrical and Electronics Engineering 16(2), 2016, pp. 2047-2054

## Düzeltilen Makaleler

- Jingyuan Wang, Sumit Paudyal, Guna Bharati, Oguzhan Ceylan, Bishnu Bhattarai and Kurt Myers, Hierarchical Coordinated Electric Vehicle Charging with Reactive Power Support to Grid, IEEE Transactions on Industrial Informatics

## Konferans Bildirileri

### Uluslararası Konferans Bildirileri (Kabul Edilen/Sunulacak Olan)

- Oğuzhan Ceylan, Sumit Paudyal, Bishnu P. Bhattarai and Kurt S. Myers. Photovoltaic hosting capacity with multiple injection nodes, IEEE International Conference on Innovative Smart Grid Technologies IEEE ISGT Europe 2017'de sunulacak, Torino, Italy, September 26-29, 2017.
- Oğuzhan Ceylan, Sumit Paudyal, Sudarshan Dahal. Assessment of harmonic distortion on distribution feeders with electric vehicles and residential PVs, submitted to 7th International Conference on Power Systems 2017, Pune, India December 21-23, 2017.

### Sunulmuş Uluslararası Konferans Bildirileri

- E. Fatih Yetkin, Oğuzhan Ceylan, Soft error resiliency of power flow calculations, 52nd Universities Power Engineering Conference (UPEC) 2017, Heraklion, Crete, Greece August 28-31 2017.
- Georgios A. Barzegkar-Ntovom, Oğuzhan Ceylan, Theofilos A. Papadopoulos, Optimization techniques for parameter estimation of dynamic load models, 52nd Universities Power Engineering Conference (UPEC) 2017, Heraklion, Crete, Greece August 28-31 2017.
- Seyhan Tural, Oğuzhan Ceylan, Sumit Paudyal, Optimal voltage control in distribution feeders with large penetration of winf, 52nd Universities Power Engineering Conference (UPEC) 2017, Heraklion, Crete, Greece August 28-31 2017.
- Oğuzhan Ceylan, Sumit Paudyal, Optimal Capacitor Placement and Sizing Considering Load Profile Variations Using Moth Flame Optimization Algorithm, Modern Power Systems 2017, Cluj, Romania,
- Sumit Paudyal, Oğuzhan Ceylan, Bishnu P. Bhattarai and Kurt S. Myers. Optimal coordinated EV charging with reactive power support in constrained distribution grids, IEEE PES General Meeting 2017, Chicago, USA, July 16-20, 2017.
- Oğuzhan Ceylan, Sumit Paudyal, Optimal harmonic reduction in distribution grids with solar, wind and electric vehicles, submitted to 52nd Universities Power Engineering Conference (UPEC) 2017, Heraklion, Crete, Greece August 29-September 1 2017.
- Oğuzhan Ceylan, Harmonic elimination of multilevel inverters by moth-flame optimization algorithm, International Symposium on Industrial Electronics (INDEL), Banja Luka, Bosnia and Herzegovina, November 3-5 2016

- Funda Daylak, Oğuzhan Ceylan, Canan Zobi Karatekin, A Daily Multiobjective Optimization Model in Smart Grids, 51st Universities Power Engineering Conference (UPEC) 2016, Coimbra, Portugal, September 6-9 2016.
- Oğuzhan Ceylan, Gulsen Taskin, Comparison of Differential Evolution and Harmony Search Methods for SVM Model Selection in Hyperspectral Image Classification, IEEE International Geoscience and Remote Sensing Symposium, Beijing, China, July 10-15, 2016.
- Oğuzhan Ceylan, Aleksandar Dimitrovski, Michael Starke, Kevin Tomsovic, Optimal Reactive Power Allocation for Photovoltaic Inverters to Limit Transformer Tap Changes, IEEE PES General Meeting 2016, Boston, USA, July 17-21, 2016.
- Guodong Liu, Bailu Xiao, Michael Starke, Oğuzhan Ceylan, Kevin Tomsovic, A Robust Load Shedding Strategy for Microgrid Islanding Transition, 2016 IEEE PES Transmission and Distribution Conference and Exposition, Dallas, USA, May 2-5 2016
- Guodong Liu, Michael Starke, Oğuzhan Ceylan, Kevin Tomsovic, Advanced Energy Storage Management in Distribution Network, Hawaii International Conference on System Sciences (HICSS 49), Kauai, USA, Jan. 5-8 2016
- Oğuzhan Ceylan, Michael Starke, Phil Irminger, Ben Ollis, Kevin Tomsovic, A Regression Based Hourly Day Ahead Solar Irradiance Forecasting Model by Labview using Cloud Cover Data, 9th International Conference on Electrical and Electronics Engineering (ELECO 2015), Bursa, Turkey November. 26-28 2015
- Oğuzhan Ceylan, Guodong Liu, Kevin Tomsovic, Parallel Harmony Search Based Distributed Energy Resource Optimization, International Conference on Intelligent System Applications to Power Systems (ISAP 2015), Porto, Portugal, September 11-16, 2015.
- Guodong Liu, Oğuzhan Ceylan, Yan Xu, Kevin Tomsovic, Optimal Voltage Regulation for Unbalanced Distribution Networks Considering Distributed Energy Resources, IEEE PES General Meeting 2015, Denver, USA, July 26-30, 2015.
- Oğuzhan Ceylan, Guodong Liu, Yan Xu, Kevin Tomsovic, Distribution System Voltage Regulation by Distributed Energy Resources, North American Power Symposium (NAPS) 2014, Pullman, USA, September 7-9 2014.
- Guodong Liu, Yan Xu, Oğuzhan Ceylan, Kevin Tomsovic, A New Linearization Method of Unbalanced Electrical Distribution Networks, North American Power Symposium (NAPS) 2014, Pullman, USA, September 7-9 2014.
- Oğuzhan Ceylan, Aydoğan Özdemir, Harmony Search Algorithm for Optimal PMU Placement, The 17th International Conference on Intelligent System Applications to Power Systems (ISAP 2013), Tokyo, Japan, July 1-4 2013.
- Oğuzhan Ceylan, Aydoğan Özdemir, Hasan Dağ, Post-Outage Voltage Calculations for Double Branch Outages, 47th International Universities. Power Engineering Conference UPEC 2012, London, UK, September 4-7 2012.
- Oğuzhan Ceylan, Aydoğan Özdemir, Hasan Dağ, Double Branch Outage Modeling and Its Solution Using Differential Evolution Method, The 16th International Conference on Intelligent System Applications to Power Systems (ISAP 2011), Hersonissos, Crete, Greece, September 25-28 2011.
- Oğuzhan Ceylan, Hasan Dağ, Aydoğan Özdemir, Harmony Search Method Based Parallel Contingency Analysis., The 2010 International Conference on

Power System Technology, POWERCON2010, Hangzhou, China, October 24-28, 2010.

- Oğuzhan Ceylan, Aydoğan Özdemir, Hasan Dağ, Gravitational Search Algorithm for Post-Outage Bus Voltage Magnitude Calculations., 45th International Universities. Power Engineering Conference UPEC 2010, Cardiff-Wales, 31 August-3 September 2010.
- Oğuzhan Ceylan, Aydoğan Özdemir, Hasan Dağ, Comparison of Post Outage Bus Voltage Magnitudes Estimated by Harmony Search and Differential Evolution Methods, The 15th International Conference on Intelligent System Applications to Power Systems (ISAP 2009), Curitiba, Brazil, 8-12 November 2009.
- Oğuzhan Ceylan, Hasan Dağ, Aydoğan Özdemir, Parallel Contingency Analysis Using Differential Evolution Based Solution For Branch Outage Problem, Fifth International Conference on Soft Computing, Computing with Words and Perceptions in System Analysis, Decision and Control - ICSCCW 2009, North Cyprus, September 2-4 2009.
- Oğuzhan Ceylan, Aydoğan Özdemir, Hasan Dağ, .Towards Faster Branch Outage Simulations Using Simulated Annealing and Parallel Programming., The 44th International Universities Power Engineering Conference, UPEC 2009, Glasgow, SCOTLAND, September 1-4 2009.
- Oğuzhan Ceylan, Aydoğan Özdemir, Hasan Dağ, Application Of Differential Evolution Method to Branch Outage Problem (The 2009 International Conference on Genetic and Evolutionary Methods (GEM 2009), Las Vegas, USA, July 13-16 2009.
- Oğuzhan Ceylan, Aydoğan Özdemir, Hasan Dağ, Branch Outage Solution Using Particle Swarm Optimization, Australasian Power Engineering Conference (AUPEC 2008), Sydney, Australia, 14-17 Dec 2008.
- Oğuzhan Ceylan, Özcan Kalenderli, Parallel Computation of Two Dimensional Electric Field Distribution Using PETSC, International Conference of Computational Methods in Sciences and Engineering 2004 (ICCMSE 2004), Attica, Greece, November 19-23 2004.
- Oğuzhan Ceylan, Hasan Dağ, A Simple and Faster Algorithm to Determine Nash Equilibrium in a Bilateral Electricity Market, 5th International Power Systems Conference, Timisoara, 6-7 November 2003.

## Ulusal Konferans Bildirileri

- Oğuzhan Ceylan, Gülşen Taşkın, SVM parameter selection based on harmony search with an application to hyperspectral image classification, 24<sup>th</sup> Signal Processing and Communication Application Conference (SIU), Zonguldak, Turkey, May 16-19, 2016
- Oğuzhan Ceylan, Çağıl Acar Şaylan, İşıl Yenidoğan, Hasan Dağ, Intelligent Method Based Feature Selection Algorithms for Medical Data Sets, Ulusal Tıp Bilişimi Kongresi, Antalya, Turkey, 2012
- Hasan Dağ, Oğuzhan Ceylan, Metin Demiralp, Factorized High Dimensional Model Representation in Approximation of High Dimensional Transfer Equation, 12th National Mechanics Congress, Konya Turkey, September, 2001. (In Turkish)