

Prof. Veysel Murat İstemihan Genç

Personal Information

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Education Information

Doctorate, Washington University İn St. Louis, Elektrik-Elektronik Muhendisligi, United States Of America 1997 - 2001
Post Graduate, Washington University İn St. Louis, Systems Science And Mathematics, United States Of America 1997 - 1998
Post Graduate, İstanbul Teknik Üniversitesi, Elektrik-Elektronik Fakültesi, Elektrik Mühendisliği Bölümü, Turkey 1995 - 1997
Post Graduate, Boğaziçi Üniversitesi, Fen Bilimleri Enstitüsü, Sistem Ve Kontrol Mühendisliği (Y) (Tezli), Turkey 1994 - 1997
Under Graduate, İstanbul Teknik Üniversitesi, Elektrik-Elektronik Fakültesi, Elektrik Mühendisliği Bölümü, Turkey 1989 - 1994

Foreign Languages

English

Dissertations

Doctorate, Hopf Bifurcation Related Coherent Oscillations in Electric Power Systems with a Clustered Texture, Washington University İn St. Louis, Elektrik-Elektronik Muhendisligi, 2001
Post Graduate, Neural Network based flux observer for a field oriented controlled induction machine, Boğaziçi Üniversitesi, Fen Bilimleri Enstitüsü, Sistem Ve Kontrol Mühendisliği (Y) (Tezli), 1997
Post Graduate, Yerel elektrik santrallerinin kontrolu, İstanbul Teknik Üniversitesi, Elektrik-Elektronik Fakültesi, Elektrik Mühendisliği Bölümü, 1997

Research Areas

Technical Sciences, Electrical and Electronics Engineering, Energy, Power System Analysis, Electric Power Transmission, Distribution and Protection

Academic Titles / Tasks

Associate Professor, İstanbul Teknik Üniversitesi, Elektrik-Elektronik Fakültesi, Elektrik Mühendisliği Bölümü, 2014 - Continues
Assistant Professor, İstanbul Teknik Üniversitesi, Elektrik-Elektronik Fakültesi, Elektrik Mühendisliği Bölümü, 2004 - 2014
Research Assistant, İstanbul Teknik Üniversitesi, Elektrik-Elektronik Fakültesi, Elektrik Mühendisliği, 1996 - 2004

Professional Experience

Fakülte Akademik Kurul Üyesi, İstanbul Teknik Üniversitesi, Elektrik-Elektronik Fakültesi, Elektrik Mühendisliği Bölümü, 2004 - Continues
Deputy Head of Department, İstanbul Teknik Üniversitesi, Elektrik-Elektronik Fakültesi, Elektrik Mühendisliği Bölümü,

Courses

Analysis of Power System Dynamics, Doctorate, 2016 - 2017, 2017 - 2018

Jury Memberships

Doctoral Examination, Doktora Yeterlik Komisyonu, Istanbul Teknik Üniversitesi, January, 2018

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- **A Real-Time Self-Healing Methodology Using Model- and Measurement-Based Islanding Algorithms**
Mahdi M., Genç V. M. İ.
IEEE TRANSACTIONS ON SMART GRID, vol.10, pp.1195-1204, 2019 (Journal Indexed in SCI)
- **Preventive and Corrective Control Actions on Power Systems via Heuristic Optimization Methods with Consecutive Search Space Reduction**
Fatih Kucuktezcan C., Murat Istemihan Genç V. M. İ. , Kaan Erol O.
Electric Power Components and Systems, 2019 (Journal Indexed in SCI)
- **Post-fault prediction of transient instabilities using stacked sparse autoencoder**
Mahdi M., Genç V. M. İ.
Electric Power Systems Research, vol.164, pp.243-252, 2018 (Journal Indexed in SCI Expanded)
- **Multilabel learning for the online transient stability assessment of electric power systems**
Beyranvand P., Genç V. M. İ. , Çataltepe Z.
Turkish Journal of Electrical Engineering and Computer Sciences, vol.26, pp.2661-2675, 2018 (Journal Indexed in SCI Expanded)
- **Probabilistic dynamic security assessment of large power systems using machine learning algorithms**
Jafarzadeh S., Genç V. M. İ.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.26, pp.1479-1490, 2018 (Journal Indexed in SCI)
- **Dynamic security enhancement of power systems using mean-variance mapping optimization**
KUCUKTEZCAN C. F. , Genç V. M. İ.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.25, pp.3188-3200, 2017 (Journal Indexed in SCI)
- **Preventive and corrective control applications in power systems via Big Bang-Big Crunch optimization**
Kucuktezcan C. F. , Genç V. M. İ.
INTERNATIONAL JOURNAL OF ELECTRICAL POWER & ENERGY SYSTEMS, vol.67, pp.114-124, 2015 (Journal Indexed in SCI)
- **A new dynamic security enhancement method via genetic algorithms integrated with neural network based tools**
Kucuktezcan C. F. , Genç V. M. İ.
ELECTRIC POWER SYSTEMS RESEARCH, vol.83, pp.1-8, 2012 (Journal Indexed in SCI)
- **Decision Tree-Based Preventive and Corrective Control Applications for Dynamic Security Enhancement in Power Systems**
Genc I., Diao R., Vittal V., Kolluri S., Mandal S.
IEEE TRANSACTIONS ON POWER SYSTEMS, vol.25, pp.1611-1619, 2010 (Journal Indexed in SCI)
- **A Robust Fault Detection and Isolation Method in Load Frequency Control Loops**
Caliskan F., Genc I.
IEEE TRANSACTIONS ON POWER SYSTEMS, vol.23, pp.1756-1767, 2008 (Journal Indexed in SCI)
- **Impact of Distributed Generators on the Oscillatory Stability of Interconnected Power Systems**
Genç V. M. İ. , Usta Ö.

Turkish Journal Of Electrical Engineering And Computer Sciences, vol.3, pp.149-160, 2005 (Journal Indexed in SCI)

- **Clustering the bulk power system with applications towards Hopf bifurcation related oscillatory instability**

Genç I., Schattler H., Zaborszky J.

ELECTRIC POWER COMPONENTS AND SYSTEMS, vol.33, pp.181-198, 2005 (Journal Indexed in SCI)

Articles Published in Other Journals

- **Güç Sistemlerinde Geçici Hal Kararsızlığının Arıza Öncesi Fazör Ölçümleri Kullanarak Karar Ağacı Tabanlı Kestirimi**

SANER C. B. , KESİCİ M., Mahdi M., YASLAN Y., GENÇ V. M. İ.

Süleyman Demirel Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.23, pp.6-14, 2019 (Other Refereed National Journals)

- **Unknown Input Observer Based Robust Actuator Fault Detection and Isolation in Interconnected Power Systems**

GENÇ V. M. İ. , ÇALIŞKAN F.

Balkan Journal of Electrical and Computer Engineering, vol.7, pp.6-14, 2019 (Refereed Journals of Other Institutions)

- **A Novel Feature Selection Method for the Dynamic Security Assessment of Power Systems Based on Multi-Layer Perceptrons**

Beyranvand P., KÜÇÜKTEZCAN C. F. , ÇATALTEPE Z., GENÇ V. M. İ.

International Journal of Intelligent Systems and Applications in Engineering, vol.1, pp.53-58, 2018 (Refereed Journals of Other Institutions)

Supported Projects

Genç V. M. İ. , Project Supported by Higher Education Institutions, Akıllı Şebekelerde Sistem Kararlılığının Artırılmasında İzleme Kontrol ve Optimizasyon Yöntemleri, 2018 - 2019

Genç V. M. İ. , Al Waeli A. M. J. K. , Project Supported by Higher Education Institutions, Mikro Şebekelerde Ada Durumuna Geçme Koşulunun Karar Ağaçları Kullanarak Tespit Edilmesi, 2017 - 2018

Genç V. M. İ. , Project Supported by Higher Education Institutions, Geçici Hal Kararlılığı için Güç Sistemlerine Uygulanan Düzeltici Kontrol Yöntemleri, 2016 - 2018

Genç V. M. İ. , Project Supported by Higher Education Institutions, YAVAŞ EŞEVRELİLİĞE DAYALI KORUYUCU ADALARA AYIRMA İÇİN GÜVENLİK DEĞERLENDİRMESİ, 2015 - 2018

Genç V. M. İ. , Project Supported by Higher Education Institutions, Küçük İşaret Kararlılığı için Sınıflandırma (Karar) Ağacı Tabanlı Üretiminin Optimal Yeniden Planlanması, 2012 - 2018

Genç V. M. İ. , Project Supported by Higher Education Institutions, KARAR AĞAÇLARI KULLANILARAK GÜÇ SİSTEMLERİNDE GEÇİCİ HAL KARARLILIĞINA İLİŞKİN GÜVENLİK BÖLGELERİNİN HESAPLANMASI VE ÜRETİMİNİN YENİDEN PLANLANMASI, 2010 - 2018

Genç V. M. İ. , Project Supported by Higher Education Institutions, Bilinmeyen Girişli Gözlemleyiciler Yardımıyla Yük Frekans Kontrolünde Dayanımlı Algılayıcı Arıza Tespiti ve Ayırt Edilmesi, 2007 - 2018

Genç V. M. İ. , Project Supported by Higher Education Institutions, Salınlı Kararsızlıklara Karşı Güç Üretimi Dağılımı için Fizibilite Sınırlarının Hesaplanması, 2004 - 2018

Genç V. M. İ. , Project Supported by Higher Education Institutions, Rüzgar Türbini Generatörlerinin Güç Sistemi Dinamik ve Statik Güvenliği Üzerine Etkilerinin İncelenmesi ve Makina Öğrenmesi Yöntemleri Yardımıyla Değerlendirilmesi, 2014 - 2017

Genç V. M. İ. , Project Supported by Higher Education Institutions, Yenilenebilir Enerji Kaynaklarına Sahip bir Mikro Şebekenin Dinamik Performansının İyileştirilmesi, 2015 - 2016

Genç V. M. İ. , Project Supported by Higher Education Institutions, Güç Sistemlerinde Gerilim Kararlılığının Karar Ağaçları Yardımıyla Değerlendirilmesi, 2012 - 2015

Genç V. M. İ. , Project Supported by Higher Education Institutions, Güç Sistemlerinde Veri Madenciliği Uygulamalarıyla

Dinamik Güvenliğin Değerlendirilmesi ve İyileştirilmesi, 2012 - 2015

Genç V. M. İ. , Project Supported by Higher Education Institutions, GÜÇ SİSTEMLERİNİN İŞARET KARARLILIĞINA İLİŞKİN GÜVENLİK BÖLGELERİ VE SINIRLARININ KARAR AĞAÇLARI İLE BELİRLENMESİ VE GÜVENLİĞİ GELİŞTİREN KONTROL YÖNTEMLERİ TASARIMI, 2009 - 2011

Activities in Scientific Journals

TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES , Editor, 2018 - Continues

Memberships / Tasks in Scientific Organizations

Chairman, 2017 - Continues

Scientific Refereeing

TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES , SCI Journal, March 2018

TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES , SCI Journal, February 2018

TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES , SCI Journal, January 2018

IEEE Transactions on Power Systems, SCI Journal, December 2017

TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES , SCI Journal, December 2017

IEEE Transactions on Power Systems, SCI Journal, November 2017

IEEE Transactions on Power Systems, SCI Journal, November 2017

IEEE Transactions on Power Systems, SCI Journal, November 2017

TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES , SCI Journal, September 2017

IEEE Transactions on Power Systems, SCI Journal, July 2017

TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES , SCI Journal, May 2017

IEEE Transactions on Power Systems, SCI Journal, April 2017

IEEE Transactions on Power Systems, SCI Journal, April 2017

IEEE Transactions on Power Systems, SCI Journal, April 2017

IEEE Transactions on Power Systems, SCI Journal, March 2017

TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES , SCI Journal, February 2017

IEEE Transactions on Power Systems, SCI Journal, December 2016

TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES , SCI Journal, December 2016

IEEE Transactions on Power Systems, SCI Journal, December 2016

TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES , SCI Journal, July 2016

TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES , SCI Journal, July 2016

TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES , SCI Journal, July 2016

TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES , SCI Journal, June 2016

TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES , SCI Journal, April 2016

TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES , SCI Journal, July 2015

TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES , SCI Journal, July 2015

TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES , SCI Journal, February 2015

IEEE Transactions on Power Systems, SCI Journal, January 2015

IEEE Transactions on Power Systems, SCI Journal, January 2015

IEEE Transactions on Power Systems, SCI Journal, December 2014

IEEE Transactions on Power Systems, SCI Journal, October 2014

IEEE Transactions on Power Systems, SCI Journal, August 2014

IEEE Transactions on Power Systems, SCI Journal, August 2014

TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES , SCI Journal, June 2014

IEEE Transactions on Power Systems, SCI Journal, June 2014

IEEE Transactions on Power Systems, SCI Journal, May 2014

TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES , SCI Journal, May 2014
IEEE Transactions on Power Systems, SCI Journal, April 2014
TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES , SCI Journal, March 2014
IEEE Transactions on Power Systems, SCI Journal, October 2013
IEEE Transactions on Power Systems, SCI Journal, October 2013
TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES , SCI Journal, July 2013
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IEEE Transactions on Power Systems, SCI Journal, August 2012
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IEEE Transactions on Power Systems, SCI Journal, June 2012
TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES , SCI Journal, May 2012
TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES , SCI Journal, April 2012
TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES , SCI Journal, February 2012
TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES , SCI Journal, September 2011
TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES , SCI Journal, September 2011
TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES , SCI Journal, July 2011
TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES , SCI Journal, August 2010
TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES , SCI Journal, July 2010
TURKISH JOURNAL OF ELECTRICAL ENGINEERING & COMPUTER SCIENCES , SCI Journal, April 2010
IEEE Transactions on Power Systems, SCI Journal, September 2006

Invited Congress and Symposium Activities

12th IEEE PES PowerTech Conference, Attendee, Manchester, United Kingdom, 2017
5th International Istanbul Smart Grid and Cities Congress and Fair, Attendee, İstanbul, Turkey, 2017
International Istanbul Smart Grids and Cities Congress and Fair, Session Moderator, İstanbul, Turkey, 2017
IEEE PES Innovative Smart Grid Technologies ISGT 2016, Attendee, Ljubljana, Slovenia, 2016

Citations

Total Citations (WOS):125
h-index (WOS):5

Awards

Genç V. M. İ. , Proje Performans Ödülü, Tübitak, February 2020