

# Lect. ÇAĞLAR FIRAT ÖZGENEL

## Personal Information

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## International Researcher IDs

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## Education Information

Doctorate, Middle East Technical University, Faculty of Architecture, Department of Architecture, Turkey 2012 - 2018

Postgraduate, Middle East Technical University, Faculty of Architecture, Department of Architecture, Turkey 2009 - 2012

Undergraduate, Middle East Technical University, Faculty of Arts and Sciences, Department of Physics, Turkey 2004 - 2009

## Dissertations

Doctorate, Crack Detection with Deep Learning: An Exemplary Study of Data Design in Architecture, Middle East Technical University, Faculty of Architecture, Department of Architecture, 2018

Postgraduate, Developing a tool for acoustical performance evaluation throughout the design, Middle East Technical University, Graduate School of Natural and Applied Sciences, Yapı Bilimleri (YI) (Tezli), 2012

## Research Areas

Artificial Intelligence, Computer Learning and Pattern Recognition, Architecture

## Academic Titles / Tasks

Lecturer, Middle East Technical University, Faculty of Architecture, Department of Architecture, 2010 - Continues

## Courses

DIGITAL DESIGN STUDIO II: ADVANCED THEMES, Undergraduate, 2018 - 2019

DIGITAL DESIGN STUDIO, Undergraduate, 2019 - 2020, 2018 - 2019, 2017 - 2018

## Published journal articles indexed by SCI, SSCI, and AHCI

### I. Proposal of a New Tool for 3D Pattern Generation

- Ozgenel F., Sorguc A. G.  
 NEXUS NETWORK JOURNAL, vol.17, no.2, pp.655-670, 2015 (SCI-Expanded)
- II. DEVELOPING AN INTERFACE IN PERFORMANCE BASED COMPUTATIONAL DESIGN: ACOUSTICAL PERFORMANCE OF PRELIMINARY DESIGNS**  
 Ozgenel Ç. F., Sorguc A.  
 METU JOURNAL OF THE FACULTY OF ARCHITECTURE, vol.28, pp.243-253, 2011 (AHCI)

## Books & Book Chapters

- I. XI. Mimarlıkta Sayısal Tasarım Ulusal Sempozyumu: MSTAS2017 / İMKANSIZ MEKANLAR : OLANAKSIZIN OLANAĞI**  
 Sorguç A. (Editor), Kruşa Yemişcioğlu M. (Editor), Özgenel Ç. F. (Editor)  
 Odtü Mimarlık Fakültesi, Ankara, 2017

## Refereed Congress / Symposium Publications in Proceedings

- I. A Computational Design Workshop Experience for 21st Century Architecture Education**  
 SORGUÇ A., KRUŞA YEMİŞCİOĞLU M., ÖZGENEL Ç. F.  
 eCAADe SIGraDi 2019, Porto, Portugal, 11 - 13 September 2019, vol.1, pp.127-136
- II. STEAM Approach for Architecture Education**  
 SORGUÇ A., ÖZGENEL Ç. F., KRUŞA YEMİŞCİOĞLU M., Küçüksubaşı F., YILDIRIM İ. S., Antonini E., Bartolomei L., Ovesen N., Steino N.  
 eCAADe SIGraDi 2019, Porto, Portugal, 11 - 13 September 2019, vol.1, pp.137-146
- III. Sayısal Tasarım Eğitiminde Doğa Öğrenili Mimarlık**  
 Sorguç A., Kruşa Yemişcioğlu M., Özgenel Ç. F.  
 MSTAS2019: Mimarlıkta Sayısal Tasarım Ulusal Sempozyumu, Kocaeli, Turkey, 17 - 18 June 2019, vol.1, no.1
- IV. Architecture 4.0: A New Manifestation of Contemporary Technology**  
 Kruşa Yemişcioğlu M., Sorguç A., Özgenel Ç. F.  
 International Conference on Digital Transformation & Smart Systems, Ankara, Turkey, 24 - 26 October 2018
- V. Multiverse of a Form**  
 SORGUÇ A., KRUŞA YEMİŞCİOĞLU M., ÖZGENEL Ç. F.  
 Proceedings of the 36th International Conference on Education and Research in Computer Aided Architectural Design in Europe, Łódź, Poland, 19 - 21 September 2018, vol.2, pp.411-416
- VI. Crystal Formations and Symmetry in the Search of Patterns in Architecture**  
 KRUŞA YEMİŞCİOĞLU M., SORGUÇ A., ÖZGENEL Ç. F.  
 36. eCAADe: Education and Research in Computer Aided Architectural Design in Europe, Łódź, Poland, 19 - 21 September 2018, vol.2, pp.121-128
- VII. Performance Comparison of Pretrained Convolutional Neural Networks on Crack Detection in Buildings**  
 Özgenel Ç. F., Sorguç A.  
 35th International Symposium on Automation and Robotics in Construction (ISARC 2018), Berlin, Germany, 20 - 25 July 2018, pp.693-700
- VIII. Yazılımların Biçimlendiriciliği,Biçime Yabancı Örütürler**  
 SORGUÇ A., ÖZGENEL Ç. F., KRUŞA YEMİŞCİOĞLU M.  
 MSTAS2018: Mimarlıkta Sayısal Tasarım Ulusal Sempozyumu, Isparta, Turkey, 21 - 22 June 2018
- IX. Transcoding Crystals on the search for Extreme in Architecture**  
 Sorguç A., Kruşa Yemişcioğlu M., Özgenel Ç. F.  
 ICMMA 2017, Tokyo, Japan, 11 - 13 December 2017
- X. Multiverse of a Form Snowflake to Shelder**

- SORGUÇ A., Yemişcooğlu M. K., ÖZGENEL Ç. F.  
 36th International Conference on Education and Research in Computer Aided Architectural Design in Europe,  
 eCAADe 2018, Łódź, Poland, 19 - 21 September 2018, vol.2, pp.411-416
- XI. **The Role of VR as a New Game Changer in Computational Design Education**  
 Sorguç A., Kruşa Yemişciooğlu M., Özgenel Ç. F., Katipoğlu M. O., Rasulzade R.  
 35th eCAADe Conference, Rome, Italy, 20 - 22 September 2017, vol.1, pp.401-408
- XII. **Mimarlık Eğitiminde Tepkimeli Kinetik Sistem Yaklaşımı**  
 SORGUÇ A., KÜÇÜKSUBAŞI F., ÜLGEN S., ÖZGENEL Ç. F., KRUŞA YEMİŞCİOĞLU M.  
 MSTAS2017 : 11, MİMARLIKTA SAYISAL TASARIM ULUSAL SEMPOZYUMU, Ankara, Turkey, 14 - 15 June 2017,  
 pp.60-69
- XIII. **Otonom Çatlak Tespitinde Kullanılan Görüntü İşleme Yöntemleri ve Teknolojinin Potansiyelleri**  
 Özgenel Ç. F.  
 3. Ulusal Yapı Kongresi ve Sergisi, Ankara, Turkey, 24 - 26 November 2016
- XIV. **Biçim Arayışlarında Sayısal İmalat Üretim Teknolojilerin Dönüştürücü Gücü**  
 SORGUÇ A., ÖZGENEL Ç. F., ÜLGEN S., KÜÇÜKSUBAŞI F., KRUŞA YEMİŞCİOĞLU M.  
 10. Mimarlıkta Sayısal Tasarım Ulusal Sempozyumu, İstanbul, Turkey, 27 - 28 June 2016
- XV. **Development of a Virtual Learning Environment Hittites Empire**  
 KİLİŞ S., ALKİŞ Y., KADIRHAN Z., ÇETİNKAYA H. H., ÖZGENEL Ç. F., TOKEL S. T.  
 5th European Immersive Education Summit (EiED 2015), 9 - 11 September 2015
- XVI. **A new method of curve fitting for calculation of reverberation time from impulse responses with insufficient length**  
 Özgenel Ç. F., Sorguç A.  
 ASME 2012 Noise Control and Acoustics Division Conference at InterNoise 2012, NCAD 2012, New-York, United States Of America, 19 - 22 August 2012, pp.545-549
- XVII. **A new method of curve fitting for calculation of reverberation time from impulse responses with insufficient length**  
 Özgenel Ç. F., SORGUÇ A.  
 41st International Congress and Exposition on Noise Control Engineering 2012, INTER-NOISE 2012, New York, United States Of America, 19 - 22 August 2012, vol.11, pp.9066-9070
- XVIII. **A NEW METHOD OF CURVE FITING FOR CALCULATION OF REVERBERATION TIME FROM IMPULSE RESPONSES WITH INSUFFICIENT LENGTH**  
 ÖZGENEL Ç. F., Sorguc A. G.  
 Internoise/ASME 2012 Noise Control and Acoustics Division Conference, New-York, United States Of America, 19 - 22 August 2012, pp.545-549
- XIX. **A New Method Of Curve Fitting For Calculating Reverberation Time From Impulse Responses With Insufficient Length**  
 SORGUÇ A., ÖZGENEL Ç. F.  
 Internoise, 19 - 22 August 2012

## Supported Projects

- SORGUÇ A., ÖZGENEL Ç. F., Project Supported by Higher Education Institutions, Yapı Belgelemede Üretken Çekişmeli Ağlar (Generative Adversarial Network) ile Gürültü Silme, 2018 - 2019
- Sorguç A., Özgenel Ç. F., Kruşa Yemişciooğlu M., Yıldırım İ. S., Erasmus Project, Greening the skills of Architecture students via STEAM education, 2017 - 2018
- Sorguç A., Kruşa Yemişciooğlu M., Özgenel Ç. F., Yıldırım İ. S., EU Supported Other Project, Design of Curriculum for Woodworking CNC Operators in Turkey, 2015 - 2017
- Kruşa Yemişciooğlu M., Özgenel Ç. F., Sorguç A., Company, İstanbul 3 Havalimanı Çelik Konstrüksyonu, 2016 - 2016
- Özgenel Ç. F., Sorguç A., Project Supported by Higher Education Institutions, Development of Navigation Algorithm for Autonomous/Semi-autonomous Robotic Systems to be Utilized in Building Inspection/Monitoring , 2016 - 2016

Özgenel Ç. F., Sorguç A., Industrial Thesis Project, Gişe Geçişleri İçin Aktif Gürültü Bariyeri , 2014 - 2015  
Özgenel Ç. F., Sorguç A., Kruşa Yemişcioğlu M., Project Supported by Higher Education Institutions, METU Campus Vertical and Horizontal Noise Mapping, 2013 - 2014

## Scientific Refereeing

AUTOMATION IN CONSTRUCTION, Journal Indexed in SCI-E, October 2019  
Mimarlıkta Sayısal Tasarım Ulusal Sempozyumu 2019, Conference Paper (Full Text), March 2019  
eCAADE SIGraDi 2019 Conference, Conference Paper (Full Text), March 2019  
IEEE ACCESS, Journal Indexed in SCI-E, November 2018  
Metu Journal Of The Faculty Of Architecture, Journal Indexed in AHCI, May 2018  
Metu Journal Of The Faculty Of Architecture, Journal Indexed in AHCI, December 2014

## Tasks In Event Organizations

Sorguç A., Kruşa Yemişcioğlu M., Özgenel Ç. F., STEAM Approach in Architectural Education, Scientific Congress, Ankara, Turkey, Aralık 2018  
Sorguç A., Özgenel Ç. F., Kruşa Yemişcioğlu M., Cocoon: A Computational Design Workshop, Workshop Organization, Ankara, Turkey, Eylül 2018  
Sorguç A., Kruşa Yemişcioğlu M., Özgenel Ç. F., MSTAS.2017: 11. National Symposium of Computational Design in Architecture, Scientific Congress, Ankara, Turkey, Haziran 2017  
Sorguç A., Özgenel Ç. F., Kruşa Yemişcioğlu M., Nexus2014: Relationship between Mathematics and Architecture, Scientific Congress, Ankara, Turkey, Haziran 2014

## Metrics

Publication: 23  
Citation (WoS): 5  
Citation (Scopus): 132  
H-Index (WoS): 2  
H-Index (Scopus): 2

## Awards

Özgenel Ç. F., Yayın Teşvik Ödülü, Tübitak Ulakbim, January 2012