### Prof. İPEK GÜRSEL DİNO

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International Researcher IDs

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Publons / Web Of Science ResearcherID: AAA-6763-2019

ScopusID: 55316964000 Yoksis Researcher ID: 190679

#### **Education Information**

- I. Doctorate, Technische Universiteit Delft, Architecture, Building Technology, Netherlands 2006 2010
- II. Postgraduate, Carnegie Mellon University, Mimarlık, School of Architecture, United States Of America 2002 2005
- III. Postgraduate, Middle East Technical University, Faculty of Architecture, Department of Architecture, Turkey 2000 2002
- IV. Undergraduate, Gazi University, Mimarlık Fakültesi, Mimarlık Bölümü, Turkey 1996 2000

### Foreign Languages

- I. Dutch, A1 Beginner
- II. English, C1 Advanced

#### Dissertations

- Doctorate, CLIP. Computational Support for Lifecycle Integral. Building Performance Assessment, Delft University
  Of Technology, Building Technology Department, 2010
- II. Postgraduate, The Limits of virtuality in space: The transformative relations between immateriality and architecture, Middle East Technical University, Faculty of Architecture, Department of Architecture, 2002

# Research Areas

Performance of Constructed Facilities, Architecture, Building Design, Physical Urban Protection, Engineering and Technology

### Academic Titles / Tasks

- I. Professor, Middle East Technical University, Faculty of Architecture, Department of Architecture, 2024 Continues
- II. Associate Professor, Middle East Technical University, Faculty of Architecture, Department of Architecture, 2019 2024
- III. Assistant Professor, Middle East Technical University, Faculty of Architecture, Department of Architecture, 2011 2018

# Academic and Administrative Experience

I. Enstitü Yönetim Kurulu Üyesi, Middle East Technical University, Presidency Office, Presidency Office, 2020 - Continues

#### Courses

- I. Climate change and the Built Environment, Postgraduate, 2021 2022
- II. Performative Architectural Lab, Undergraduate, 2020 2021
- III. DIRECTED STUDIES IN ENVIRON. DESIGN I, Postgraduate, 2018 2019, 2017 2018
- IV. BASIC DESIGN, Undergraduate, 2018 2019
- V. M.ARCH THESIS IN ARCHITECTURE, Postgraduate, 2018 2019
- VI. DIGITAL MEDIA IN ARCHITECTURE I, Undergraduate, 2018 2019
- VII. INTRODUCTION TO ARCHITECTURAL DESIGN, Undergraduate, 2017 2018

# **Advising Theses**

- I. Gürsel Dino I., Analyzing thermal comfort of transitional spaces through climate-responsive design solutions, Postgraduate, Ü.NUR(Student), 2023
- II. Gürsel Dino I., Akgül Ç., Climate change impact on a 3D printed concrete building, Postgraduate, F.SİNAN(Student), 2023
- III. Gürsel Dino I., Kalkan S., Urban scale prediction of indoor daylighting illumination for sustainable buildings, Postgraduate, İ.CANLI(Student), 2022
- IV. Gürsel Dino I., Akgül Ç., Global Sensitivity Analysis for Urban Heat Island Effect: A Case Study in a Residential Neighbourhood in Ankara, Turkey, Postgraduate, B.Çakır(Student), 2022
- V. Gürsel Dino I., Baş Bütüner F., Nature-based design for water-sensitive cities: A street-scale computational approach, Postgraduate, A.CAN(Student), 2022
- VI. Gürsel Dino I., DECODING CITY SQUARES WITH BIG DATA: A METHOD FOR URBAN ANALYTICS, Postgraduate, A.ÖZEN(Student), 2022
- VII. Gürsel Dino I., Akgül Ç., A data-driven approach for predicting solar energy potential of buildings in urban fabric, Postgraduate, A.DURAN(Student), 2022
- VIII. Gürsel Dino İ., THE EFFECTS OF PERFORMANCE-BASED DESIGN TOOLS ON DESIGN THINKING PROCESS, Postgraduate, G.GÖRGÜN(Student), 2022
  - IX. Gürsel Dino İ., AN INVESTIGATION INTO BUILDING OCCUPANT BEHAVIOR OF DIFFERENT HOUSEHOLD TYPOLOGIES IN ARCHITECTURE, Postgraduate, M.İPEK(Student), 2022
  - X. Gürsel Dino İ., Computational urban analytics for walkability: Çankaya, Ankara case, Postgraduate, S.İREM(Student), 2021
  - XI. Gürsel Dino İ., An integrated computational framework for natural ventilation and airborne contaminant dispersion analysis in architectural design, Doctorate, G.MERİN(Student), 2021
- XII. Gürsel Dino İ., Sürer E., Immersive Design Environments for Performative Architectural Design: A BIM-Based Approach, Postgraduate, Ş.AKIN(Student), 2020
- XIII. Gürsel Dino İ., Sürer E., The Influence of Emergent Mixed-Reality Technologies on Design Thinking, Postgraduate, H.CEREN(Student), 2019
- XIV. Sürer E., Gürsel Dino İ., Developing Building Information Modelling Based Virtual Reality and Mixed Reality Environments for Architectural Design and Improving User Interactions with Serious Games, Postgraduate, O.Ergün(Student), 2019
- XV. Gürsel Dino I., ÇAKMAKLI A. B., SUSTAINABILITY IN ARCHITECTURAL EDUCATION: THE IMPACT OF EDUCATION

- ON PERCEPTIONS OF SUSTAINABILITY, Postgraduate, A.NİLÜFER(Student), 2019
- XVI. Gürsel Dino I., FREE FORM ARCHITECTURE AND INTERIOR SPACE: A CRITICAL ANALYTICAL APPROACH, Postgraduate, S.YILMAZ(Student), 2019
- XVII. Gürsel Dino I., COMPUTATIONAL DESIGN LEARNING: THE SMARTGEOMETRY CASE, Postgraduate, Ö.NUR(Student), 2019
- XVIII. GÜRSEL DİNO İ., An exploratory data analysis on architectural research agenda., Postgraduate, B.Ekinci(Student), 2019
  - XIX. Gürsel Dino I., MAP-MAKING AS A WALKING-BASED SPATIAL PRACTICE IN ARCHITECTURE, Postgraduate, S.ÖZCİVANOĞLU(Student), 2019
  - XX. GÜRSEL DİNO İ., An inquiry of space architecture: design considerations and design process., Postgraduate, E.Yeğen(Student), 2019
  - XXI. Gürsel Dino I., Yoncaci Arslan P., Bunker-scape: Defense Architecture in Gallipoli Peninsula, Postgraduate, C.ARIKBOĞA(Student), 2019
- XXII. Gürsel Dino İ., An exploratory data analysis on architectural research agenda, Postgraduate, B.EKİNCİ(Student), 2019
- XXIII. Gürsel Dino I., Akgül Ç., Architectural Design for Climate Change Mitigation and Adaptation Strategies in Existing Buildings, Postgraduate, G.AKKÖSE(Student), 2019
- XXIV. Gürsel Dino I., Çakmakli A. B., COLLABORATIVE WORKING SPACES: PROJECT ECOLOGIES AND MEANS OF INTERACTION AND COLLABORATION, Postgraduate, S.ERTAN(Student), 2019
- XXV. GÜRSEL DİNO İ., Performance-based facades: Retrofit strategies for energy efficiency and comfort in existing office buildings, Postgraduate, N.JAHED(Student), 2018
- XXVI. GÜRSEL DİNO İ., Performative Design Thinking in Architectural Practice, Postgraduate, C.ATAMAN(Student), 2018
- XXVII. GÜRSEL DİNO İ., An interactive computational approach to 3D layout design of single-family houses by evolutionary algorithms, Postgraduate, A.SAKARYALI(Student), 2017
- XXVIII. GÜRSEL DİNO İ., A computational method for the design exploration and optimization of daylighting performance of museum buildings, Postgraduate, M.FOOLADY(Student), 2017
- XXIX. GÜRSEL DİNO İ., BAYKAN A. C., Visual structures for generative design search spaces /, Postgraduate, G.MERİN(Student), 2014

# **Designed Lessons**

- I. Gürsel Dino I., Performative Architecture Lab, Postgraduate, 2017 2018
- II. Gürsel Dino I., Generative Design in Architecture, Undergraduate, 2013 2014
- III. Sorguç A., Gürsel Dino İ., DIGITAL MEDIA IN ARCHITECTURE I, Undergraduate, 2012 2013

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

I. Spatial variation of physical, mechanical, and thermophysical properties of 3D printed concrete across a full-scale wall

Bayrak A. T., Shaban N., Seyedian Choubi S., Tuncer E., Yang S., Yılmaz H. D., Alkilani A. Z., Dal H., Unluer C., Gürsel Dino I., et al.

CONSTRUCTION AND BUILDING MATERIALS, vol.431, 2024 (SCI-Expanded)

II. Perspectives of Machine Learning and Natural Language Processing on Characterizing Positive Energy Districts

Han M., Canli I., Shah J., Zhang X., GÜRSEL DİNO İ., KALKAN S.

Buildings, vol.14, no.2, 2024 (SCI-Expanded)

III. Resilient cooling of the Mediterranean office spaces under climate change Abbas G. M., AKGÜL Ç., GÜRSEL DİNO İ.

Architectural Engineering and Design Management, 2024 (SCI-Expanded)

IV. The diagonal axis from VERB to VOID: interdisciplinarity in basic design studio education

Çakmakli A. B., Dino I. G., Daglioglu E. K., Pinar E., Arslan P. Y.

ARCHNET-IJAR INTERNATIONAL JOURNAL OF ARCHITECTURAL RESEARCH, vol.17, no.4, pp.774-792, 2023 (AHCI)

V. Coupling PCM wallboard utilization with night Ventilation: Energy efficiency and overheating risk in office buildings under climate change impact

Tamer T., Gürsel Dino İ., Baker D. K., Meral Akgül Ç.

ENERGY AND BUILDINGS, vol.298, 2023 (SCI-Expanded)

VI. An integrated pipeline for building performance analysis: Daylighting, energy, natural ventilation, and airborne contaminant dispersion

Abbas G. M., Gursel Dino I., Perçin M.

JOURNAL OF BUILDING ENGINEERING, vol.75, pp.1-30, 2023 (SCI-Expanded)

VII. The impact of architectural design studio education on perceptions of sustainability

Çalıkuşu A. N., Çakmaklı A. B., Gürsel Dino I.

International Jouranl of Architectural Research: Archite-IJAR, vol.17, no.2, pp.375-392, 2023 (AHCI)

VIII. Proposing a novel mixed-reality framework for basic design and its hybrid evaluation using linkography and interviews

Cindioglu H. C., GÜRSEL DİNO İ., SÜRER E.

INTERNATIONAL JOURNAL OF TECHNOLOGY AND DESIGN EDUCATION, vol.32, no.5, pp.2775-2800, 2022 (SCI-Expanded)

 $IX. \quad \mbox{Performative design processes in architectural practices in Turkey: architects' perception}$ 

Ataman C., Gürsel Dino I.

Architectural Engineering and Design Management, vol.18, no.5, pp.690-704, 2022 (SCI-Expanded)

X. Vision-based estimation of the number of occupants using video cameras

Dino İ., Kalfaoglu E., Iseri O. K., Erdogan B., Kalkan S., Alatan A. A.

Advanced Engineering Informatics, vol.53, 2022 (SCI-Expanded)

XI. Data-driven, long-term prediction of building performance under climate change: Building energy demand and BIPV energy generation analysis across Turkey

Tamer T., Gürsel Dino I., Meral Akgül Ç.

Renewable and Sustainable Energy Reviews, vol.162, 2022 (SCI-Expanded)

XII. The impact of natural ventilation on airborne biocontaminants: a study on COVID-19 dispersion in an open office

Abbas G. M., Gürsel Dino İ.

ENGINEERING CONSTRUCTION AND ARCHITECTURAL MANAGEMENT, vol.29, no.4, pp.1609-1641, 2022 (SCI-Expanded)

XIII. Heritage Building Information Modelling for the Conservation of 20th Century Modernist Architecture

Akin S., Gursel Dino İ., Savas Sargin A.

METU JOURNAL OF THE FACULTY OF ARCHITECTURE = ODTÜ MIMARLIK FAKÜLTESI DERGIS, vol.1, pp.1-11, 2022 (AHCI)

XIV. COVID-19 dispersion in naturally-ventilated classrooms: a study on inlet-outlet characteristics Abbas G. M., Gürsel Dino I.

Journal of Building Performance Simulation, vol.15, no.5, pp.656-677, 2022 (SCI-Expanded)

XV. Involving end users in retrofit of higher education buildings

Gooding L., Erdogan B., Gürsel Dino I.

Journal of Building Engineering, vol.44, 2021 (SCI-Expanded)

XVI. Educational building retrofit under climate change and urban heat island effect

Akkose G., Akgül Ç., Gürsel Dino I.

Journal of Building Engineering, vol.40, 2021 (SCI-Expanded)

XVII. An immersive performative architectural design tool with daylighting simulations: a building information modeling-based approach

Akin S., Ergun O., Sürer E., Gürsel Dino İ.

ENGINEERING CONSTRUCTION AND ARCHITECTURAL MANAGEMENT, vol.28, no.4, pp.1319-1344, 2021 (SCI-Expanded)

XVIII. Image-based construction of building energy models using computer vision

GÜRSEL DİNO İ., Sari A. E., Iseri O. K., Akin S., Kalfaoglu E., Erdogan B., KALKAN S., ALATAN A. A. ALTOMATION IN CONSTRUCTION vol.116, 2020 (SCI Expanded)

AUTOMATION IN CONSTRUCTION, vol.116, 2020 (SCI-Expanded)

XIX. Climate change impact assessment in residential buildings utilizing RCP4.5 and RCP8.5 scenarios Akgul Ç., Dino I.

JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.35, no.3, pp.1665-1683, 2020 (SCI-Expanded)

XX. Impact of climate change on the existing residential building stock in Turkey: An analysis on energy use, greenhouse gas emissions and occupant comfort

Gürsel Dino I., Akgül Ç.

RENEWABLE ENERGY, vol.141, pp.828-846, 2019 (SCI-Expanded)

XXI. Multiobjective Design Optimization of Building Space Layout, Energy, and Daylighting Performance Dino I. G., Üçoluk G.

Journal of Computing in Civil Engineering, vol.31, 2017 (SCI-Expanded)

XXII. An evolutionary approach for 3D architectural space layout design exploration Dino I. G.

AUTOMATION IN CONSTRUCTION, vol.69, pp.131-150, 2016 (SCI-Expanded)

XXIII. Evaluation of reference modeling for building performance assessment

Dino I. G., Stouffs R.

AUTOMATION IN CONSTRUCTION, vol.40, pp.44-59, 2014 (SCI-Expanded)

XXIV. Method for energy performance integration in corporate public real estate management Dino I. G., Leeuw R., SARİYİLDİZ S., Stouffs R.

Journal of Performance of Constructed Facilities, vol.28, no.2, pp.286-302, 2014 (SCI-Expanded)

XXV. CREATIVE DESIGN EXPLORATION BY PARAMETRIC GENERATIVE SYSTEMS IN ARCHITECTURE GÜRSEL DİNO İ.

METU JOURNAL OF THE FACULTY OF ARCHITECTURE, vol.29, no.1, pp.207-224, 2012 (AHCI)

XXVI. Modeling and visualization of lifecycle building performance assessment

Gursel I., Sariyildiz S., Akin O., STOUFFS R.

ADVANCED ENGINEERING INFORMATICS, vol.23, no.4, pp.396-417, 2009 (SCI-Expanded)

### Articles Published in Other Journals

I. Shading Effect of Transparent Photovoltaic Panels on Crops Underneath Agrivoltaic Systems Seyedpour Esmaeilzad S., Gürsel Dino İ., Güney D., Yıldırım Y. E., Turan R., Özden T. AgriVoltaics Conference Proceedings, vol.1, pp.1-9, 2024 (Conference Book)

II. Teaching Architectural Design Studio Remotely: The Introduction to Architectural Design Course at

Daglioglu E. K., Pinar E., Dino I. G., Arslan P. Y., Butuner F. B.

JOURNAL OF DESIGN STUDIO, vol.2, no.2, pp.153-157, 2020 (Peer-Reviewed Journal)

III. Binalarda Güneş Kontrol Yöntemlerinin Optimizasyon Temelli Performans Değerlendirilmesi Gürsel Dino I.

Gazi Üniversitesi Fen Bilimleri Dergisi Part: C Tasarım ve Teknoloji, vol.5, no.3, pp.71-87, 2017 (Peer-Reviewed Journal)

IV. Tasarım ve Hesaplamanın Doğası

GÜRSEL DİNO İ.

Dosya, 2015 (Peer-Reviewed Journal)

### I. GELECEK, TEKNOLOJİ VE MİMARLIK

Gürsel Dino I., Abbas G. M.

in: GELECEK, TEKNOLOJİ VE MİMARLIK, İpek Gürsel Dino, Günsu Merin Abbas, Editor, TMMOB Mimarlar Odası Ankara Şubesi, Ankara, pp.1-5, 2020

# Refereed Congress / Symposium Publications in Proceedings

# Transfer Learning-Based Prediction of Heating Energy Consumption Using Urban Building Energy Models (UBEM)

Canli I., UÇAR Ş., Gursoy F. E., Halacli E. G., Iseri O. K., YAVUZ F., GÜRSEL DİNO İ., KALKAN S.

31st International Workshop on Intelligent Computing in Engineering, EG-ICE 2024, Vigo, Spain, 3 - 05 July 2024, pp.580-589

# II. From crisis to recovery: An examination of sheltering response in Türkiye after the February 6, 2023, earthquakes

Akdede N., Özaydin Ö., Ay B. Ö., Gürsel Dino I.

The NEEDS Conference, Enschede, Netherlands, 31 October - 03 November 2023

# III. Integrating Nature-Based Water Management At Street-Scale: A Design Approach For Sustainable Urban Development

Karakadılar A. C., Gürsel Dino İ., Baş Bütüner F.

ICSULA 2023 2. ULUSLARARASI SÜRDÜRÜLEBİLİR KENTLER KONGRESİ, Konya, Turkey, 26 - 27 October 2023

# IV. A Study on Planned and Unplanned Playgrounds of Post-Disaster Transitional Settlements after February 6, 2023, Kahramanmaraş earthquakes

Akdede N., Özaydin Ö., Ay B. Ö., Gürsel Dino I.

5th International Disaster and Resilience Congress, Kocaeli, Turkey, 11 - 13 October 2023

# V. A Novel Graph Neural Network for Zone-Level Urban-Scale Building Energy Use Estimation Halaçıl E. G., Canll I., Işeri O. K., YAVUZ F., Akgül Ç., KALKAN S., GÜRSEL DİNO İ.

10th ACM International Conference on Systems for Energy-Efficient Buildings, Cities, and Transportation (BuildSys), İstanbul, Turkey, 15 - 16 November 2023, pp.169-176

# VI. Useful Daylight Illuminance Prediction Under Data Imbalance in an Urban Context Canli I., KALKAN S., GÜRSEL DİNO İ.

41st Conference on Education and Research in Computer Aided Architectural Design in Europe, eCAADe 2023, Graz, Austria, 20 - 22 September 2023, vol.2, pp.599-608

### VII. Future performance evaluation of PCM integrated buildings under changing climate

Tamer T., Baker D. K., Gürsel Dino I., Akgül Ç.

IOP Conference Series: Earth and Environmental Science, Volume 1085, SBE22Delft - Innovations for the Urban Energy Transition: Preparing for the European Renovation Wave , Zuid-Holland, Netherlands, 11 - 13 October 2022, pp.1-8

### VIII. Impact of Urban Street Network on BIPV Generation Capacity of Buildings

Duran A., Akgül Ç., Gürsel Dino I.

IOP Conference Series: Earth and Environmental Science, Volume 1085, SBE22Delft - Innovations for the Urban Energy Transition: Preparing for the European Renovation Wave , Zuid-Holland, Netherlands, 11 - 13 October 2022, pp.1-8

# IX. Compiling Open Datasets to Improve Urban Building Energy Models with Occupancy and Layout Data Duran A., Işeri O. K., Akgül Ç., Kalkan S., Gürsel Dino I.

Conference of the Association for ComputerAided Architectural Design Research in Asia (CAADRIA) 2022, Sydney, Australia, 12 April - 14 May 2022, vol.2, pp.669-678

X. Building Archetype Characterization Using K-Means Clustering in Urban Building Energy Models

İşeri O. K., Gürsel Dino İ.

19th International Conference on Computer-Aided Architectural Design Futures, CAAD Futures 2021, Virtual, Online, 16 - 18 July 2021, vol.1465 CCIS, pp.222-236

XI. Afet Sonrası ve Kriz Sonrası Geçici Barınma Yerleşimleri için Sayısal Tasarım Araçlarının Kullanımı Akdede N., Ay B. Ö., Gürsel Dino I.

3rd International Disaster and Resilience Congress, Ankara, Turkey, 05 October 2021

XII. Data-driven Analysis of the Impact of Occupants' Preference on Building Performance in Classroom Spaces

Duran A., Gürsel Dino I.

Joint CIB W099 & W123 Annual International Conference 2021, Glasgow, Scotland, 9 - 10 September 2021, pp.245-255

XIII. Future Use Framework for Post-Disaster and Post-Conflict Temporary Accommodation Settlements and Units in Turkey

Akdede N., Ay B. Ö., Gürsel Dino İ.

European Network for Housing Research Conference - 2021, Lefkosia, Cyprus (Gkry), 30 August - 02 September 2021, pp.1-8

XIV. Artificial Neural Networks to Predict Performance of Classroom Spaces

Duran A., Gürsel Dino I.

Mimarlıkta Sayısal Tasarım Sempozyumu, 28 June 2021, pp.224-233

XV. A multidisciplinary approach to address climate-resilience, conservation and comfort in traditional architecture: The PROT3CT example

JAHED N., ERSOY S. N., GRIFFITHS N., GÜRSEL DİNO İ., MARINCIONI V., ÖZÇAKIR Ö., RICKABY P., SIRT ÇIPLAK E., WANG K., YILDIRIM ESEN S., et al.

1st International Conference on Moisture in Buildings 2021 (ICMB21), England, 28 - 29 June 2021

XVI. From Streetscape to Data Semantic segmentation for the prediction of outdoor thermal comfort Yazıcıoğlu G., GÜRSEL DİNO İ.

39th International Conference on Education and Research in Computer Aided Architectural Design in Europe, eCAADe 2021, Novi-Sad, Serbia, 8 - 10 September 2021, vol.1, pp.555-562

XVII. Minimizing cooling energy demand of an office building withrespect to green roof types and the angle of sun shading elements: A case study in Izmir, Turkey

Yazıcıoğlı G., Deniz E., GÜRSEL DİNO İ.

6th International Project and Construction Management Conference (e-IPCMC2020), 12 - 14 October 2020

XVIII. ENERGY DEMAND PREDICTION FOR RESIDENTIAL BUILDINGS AT DIFFERENT CLIMATE CONDITIONS BASED ON DIFFERENT DATA-DRIVEN TECHNIQUES

İşeri O. K., GÜRSEL DİNO İ.

BAUSIM 2020, 23 - 25 September 2020

XIX. An exploratory multi-objective retrofit decision-making process

Akin Ş., Işeri O. K., Erdogan B., Gürsel Dino I.

International Symposium of Architecture, Technology and Innovation (ATI), İzmir, Turkey, 26 - 28 August 2020, pp.1-10

XX. An Algorithm for Efficient Urban Building Energy Modeling and Simulation

Iseri O. K., Gürsel Dino I.

The Symposium on Simulation for Architecture and Urban Design (SimAUD), Vienna, Austria, 23 - 25 May 2020

XXI. Climate Change Impact on Multi-Objective Optimization: A Case Study on Educational Buildings Akın Ş., Işeri O. K., Akgül Ç., Erdoğan B., Gürsel Dino I.

The Symposium on Simulation for Architecture and Urban Design (SimAUD), Vienna, Austria, 23 - 25 May 2020

XXII. Vision-Based Lighting State Detection and Curtain Openness Ratio Prediction

Kalfaoğlu E., Gürsel Dino I., Işeri O. K., Akın Ş., Sarı A. E., Erdoğan B., Kalkan S., Alatan A. A.

The Symposium on Simulation for Architecture and Urban Design (SimAUD), Vienna, Austria, 23 - 25 May 2020

XXIII. Early Stage Retrofit Stakeholder Engagement: Enhancing Higher Education Project Success Gooding L., Erdogan B., Gürsel Dino I.

SBE19 Malta International Conference | Sustainability and Resilience, Attard, Malta, 21 - 22 November 2019, pp.1-10

XXIV. Video Content Analysis-Based Detection of Occupant Presence for Building Energy Modelling

Gürsel Dino I., Kalfaoğlu E., Sarı A. E., Akın Ş., Işeri O. K., Alatan A. A., Kalkan S., Erdoğan B.

CIB W78: Conference: Advances in ICT in Design, Construction and Management in Architecture, Engineering, Construction and Operations (AECO), Newcastle-Upon-Tyne, United Kingdom, 18 - 20 September 2019

XXV. Automated building energy modeling for existing buildings using computer vision

Gürsel Dino I., Sarı A. E., Kalfaoğlu E., Akın Ş., Işeri O. K., Kalkan S., Alatan A. A., Erdoğan B.

CIB W78: Conference: Advances in ICT in Design, Construction and Management in Architecture, Engineering, Construction and Operations (AECO), Newcastle-Upon-Tyne, United Kingdom, 18 - 20 September 2019

XXVI. A parametric design method for CFD-supported wind-driven ventilation

ABBAS G. M., GÜRSEL DİNO İ.

IAQVEC 2019, Bari, Italy, 5 - 07 September 2019

XXVII. Collective Residential Spaces in Sustainability Development: Turkish Housing Units within Co-Living Understanding

Ataman C., Gürsel Dino I.

Sustainable Built Environment (SBE) Resilient Built Environment for Sustainable Mediterranean Countries Conference, Milan, Italy, 4 - 05 September 2019

XXVIII. Computational Design Tools and Education: The Smartgeometry Case

Acıcan Ö., GÜRSEL DİNO İ.

DRS Learn X Design - Fifth International Conference for Design Education Researchers, 9 - 12 July 2019

XXIX. Improving Visual Design Perception by an Integrated Mixed Reality Environment for Performative Architecture

Akın Ş., Ergün O., Gürsel Dino I., Sürer E.

Virtually Real - 7th eCAADe Regional International Symposium, Aalborg, Denmark, 2 - 03 May 2019, pp.1-10

XXX. Improving Building Performance of Higher Education Buildings, Involvement of End Users Gooding L., Erdogan B., Gürsel Dino I.

INTERNATIONAL CIVIL ENGINEERING AND ARCHITECTURE CONFERENCE 2019, Trabzon, Turkey, 17-20 April 2019, pp.178-188

XXXI. Representations of Performative Architecture in Design Synthesis

ATAMAN C., GÜRSEL DİNO İ.

Materiart, 11 - 12 April 2019

XXXII. Constituting an Archive: Documentation as a Tool for the Preservation of the METU Faculty of Architecture

SAVAŞ SARGIN A., GÜRSEL DİNO İ.

3RD RMB AND 16TH DOCOMOMO GERMANY CONFERENCE, Berlin, Germany, 1 - 02 March 2019

XXXIII. Constituting an Archive: Documentation as a Tool for the Preservation of the METU Faculty of Architecture

Savaş Sargin A., Gürsel Dino I.

3RD RMB AND 16TH DOCOMOMO GERMANY CONFERENCE, Berlin, Germany, 1 - 02 March 2019, pp.319-331

XXXIV. Architectural Design in Virtual Reality and Mixed Reality Environments: A Comparative Analysis Ergün O., Akın Ş., GÜRSEL DİNO İ., SÜRER E.

26th IEEE Conference on Virtual Reality and 3D User Interfaces (VR), Osaka, Japan, 23 - 27 March 2019, pp.914-915

XXXV. Sürdürülebilir Kalkınma Hedeflerinin Yüksek Ögretime Yansıması: Mimarlık Egitimi Örnegi ÇALIKUŞU A. N., GÜRSEL DİNO İ., ÇAKMAKLI A. B.

4. Ulusal Yapı Kongresi Ve Sergisi, Antalya, Turkey, 6 - 08 December 2018

XXXVI. Paylasımlı Çalısma Mekanları (Coworking Spaces)

ERTAN S., GÜRSEL DİNO İ., ÇAKMAKLI A. B.

4. Ulusal Yapı Kongresi Ve Sergisi, Antalya, Turkey, 6 - 08 December 2018

XXXVII. The Computation of Performative Architecture within Integrated Design Process

ATAMAN C., GÜRSEL DİNO İ.

BEYOND ALL LIMITS 2018: International Congress on Sustainability in Architecture, Planning, and Design, 17 - 19 October 2018

XXXVIII. An Assessment of the Energy Performance Evaluation within the Form Conception Process ATAMAN C., GÜRSEL DİNO İ.

BEYOND ALL LIMITS 2018: International Congress on Sustainability in Architecture, Planning, and Design, 17 - 19 October 2018

XXXIX. Energy consumption of a day-occupied building utilizing phase changing material incorporating gypsum boards

Akgül Ç., Gürsel Dino İ., Şimşek B.

13th International Congress on Advances in Civil Engineering, İzmir, Turkey, 12 - 14 September 2018

XL. Performance-Based Façades: Retrofit Strategies for Energy Efficiency and Comfort in Existing Office Buildings

Jahed N., GÜRSEL DİNO İ.

13th International Congress on Advances in Civil Engineering, 12 - 14 September 2018

XLI. Approaching Net-Zero Energy Building Through Utilization of Building-Integrated Photovoltaics for Three Cities in Turkey-Preliminary Calculations

Uygun U., Akgül Ç., Gürsel Dino I., Akınoğlu B. G.

2018 International Conference on Photovoltaic Science and Technologies (PVCon), Ankara, Turkey, 4 - 06 July 2018

XLII. Approaching Net-Zero Energy Building Through Utilization of Building-Integrated Photovoltaics for Three Cities in Turkey-Preliminary Calculations

Uygun U., AKGÜL Ç., GÜRSEL DİNO İ., AKINOĞLU B. G.

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XLIII. An Immersive Design Environment for Performance-Based Architectural Design: A BIM-based Approach

Akin S., Ergun O., Sürer E., Gürsel Dino İ.

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XLIV. AN EVOLUTIONARY APPROACH FOR BUILDING ENVELOPE DESIGN WITH PHOTOVOLTAICS-INTEGRATED SHADING DEVICES

GÜRSEL DİNO İ.

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XLV. Perception Based Design Space Structures for Evolutionary Design Systems

ABBAS G. M., GÜRSEL DİNO İ.

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XLVI. Computational Design Emergence by Complexity and Morphogenesis

GÜRSEL DİNO İ., SAKARYALI A.

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XLVII. Net sıfır Enerji ve Su Tüketen Binaların Tasarımında Simülasyon ve Optimizasyon Araçlarının Önemi MERAL Ç., GÜRSEL DİNO İ., Yener Celiker Z.

4. Proje ve Yapım Yönetimi Kongresi, Anadolu Üniversitesi, Eskişehir, Turkey, 3 - 05 November 2016, pp.1312-1323

XLVIII. Enerji Etkin ve Sürdürülebilir Binaların Fotovoltaik ve Yeşil Çatı Entegrasyonunda Çok Objektifli Karar Desteği

GÜRSEL DİNO İ., MERAL Ç.

4. Proje ve Yapım Yönetimi Kongresi, Anadolu Üniversitesi, Eskişehir, Turkey, 3 - 05 November 2016, pp.1278-1289

XLIX. A study on different dynamic solar shading control strategies using multi criteria design optimization

GÜRSEL DİNO İ.

Sustainable Built Environment Conference, 13 - 15 October 2016

L. Visual Structuring for Generative Design Search Spaces

ABBAS G. M., GÜRSEL DİNO İ.

CAADence in Architecture, 16 - 17 June 2016

LI. Supporting performance data acquisition and analysis for corporate public real estate management GÜRSEL DİNO İ., Sariyildiz S., Stouffs R.

Int. Conference on Computing in Civil Engineering, Nottingham, United Kingdom, 30 June - 02 July 2010

LII. Contextual Ontology Support as External Knowledge Representation for Building Information

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Joining Languages, Cultures and Visions: CAADFutures 2009, Montreal, Canada, 17 - 19 June 2009

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GÜRSEL DİNO İ., STOUFFS R., SARİYİLDİZ S.

Intelligent Computing in Engineering (ICE08), Plymouth, United Kingdom, 2 - 04 July 2008

LIV. A digital performance assessment tool for the Dutch Government Building Agency GÜRSEL DİNO İ., STOUFFS R., SARİYİLDİZ S., LEEUW R.

5th International Conference on Innovation in Architecture, Engineering and Construction, Antalya, Turkey, 25 - 28 June 2008

LV. A computational framework for integration of performance information during the building lifecycle GÜRSEL DİNO İ., Stouffs R., Sariyildiz S.

CIB 24th W78 Conference, Maribor, Slovenia, 26 - 29 June 2007

LVI. Linking Building Commissioning and Operations and Maintenance Towards an Embedded Commissioning Practice

Akin Ö., GÜRSEL DİNO İ.

Fifth International Conference for Enhanced Building Operations, Pittsburgh, United States Of America, 11 - 13 October 2005

LVII. Embedded commissioning for building design

Akin Ö., Turkaslan Bulbul T., GÜRSEL DİNO İ., Garrett J., Akinci B., Wang H.

eWork and eBusiness in Architecture, Engineering and Construction:, İstanbul, Turkey, 8 - 10 September 2004

LVIII. Towards domain oriented semi automated model matching for supporting data exchange HONGJUN W., AKİNCİ B., GARRETT J., AKİN Ö., TURKASLAN BULBUL T., GÜRSEL DİNO İ.

10th International Conference on Computing in Civil and Building Engineering, Weimar, Germany, 2 - 04 June 2004

# **Supported Projects**

- I. Gürsel Dino I., Turan R., Akgül Ç., Göl M., Kalkan S., Taylan O., H2020 Project, LEGOFIT: Adaptable technological solutions based on early design actions for the construction and renovation of Energy Positive Homes, 2023 2027
- II. Yerci S., Gürsel Dino I., Yaşa M., Günbaş E. G., TUBITAK Project, Güç Üreten Perovskit Tabanlı Mimari Bileşenlerin Geliştirilmesi, 2023 2026
- III. Gürsel Dino İ., Kalkan S., Akgül Ç., Göl M., H2020 Project, UP2030: Urban Planning and design ready for 2030, 2023 2026
- IV. UYSAL E., HAREEDY A., Miramirkhani F., YAZAR A., Acartürk A., Erkün Osunluk A. H., KUYMULU M. B., Taşkın B., ULUSOY İ., FİLİZ N., et al., TUBITAK Project, Sustainable Urbanization with Innovative Technologies (SUIT), 2022 2025
- V. GÜRSEL DİNO İ., TAYLAN O., KALKAN S., AKGÜL Ç., TUBITAK Project, Yinelemeli Süreç Optimizasyonuna Yönelik Pozitif Enerji Bölgeleri Dijital Referansları için PED'lerin Otomatik Karakterizasyonu (PED-ACT), 2022 2025
- VI. Akgül Ç., Ercan B., Yaman U., Saritaş A., Gürsel Dino I., TÜBİTAK International Multi-Cooperation Project, RecMine -Environmental footprint reduction through eco-friendly technologies of mine tailings recycling, 2022 - 2024

- VII. Pekeriçli M. K., Savaş Sargın A., Erdoğan S. T., Tavukçuoğlu A., Gürsel Dino İ., Ay B. Ö., Erasmus Project, REcube: REthink, REvive, REuse Transmitting the knowledge for the green regeneration of the European Concrete Heritage, 2021 2024
- VIII. Gürsel Dino I., Kalkan S., Akgül Ç., Gerçek Kurt D., TUBITAK Project, MAKİNE ÖĞRENMESİ VE SİMÜLASYON TABANLI, İKLİM DEĞİŞİKLİĞİNE YÖNELİK KENTSEL BİNA ENERJİ MODELLEMESİ (KBEM) İÇİN ARAÇ GELİSTİRİLMESİ, 2021 2024
- IX. AKGÜL Ç., GÜRSEL DİNO İ., TAMER T., AKKÖSE G., Project Supported by Higher Education Institutions, Türkiyedeki yapılı çevrenin iklim değişikliği direncinin haritalanması Enerji tüketimi BIPV enerji üretimi karbon ayak izi ve kullanıcı termal konforu üzerine veri analizi Mapping climate change resilience of Turkish built environment Data analytics on energy consumption BIPV energy generation carbon footprint and occupant thermal comfort, 2021 2023
- X. GÜRSEL DİNO İ., TÜBİTAK International Bilateral Joint Cooperation Program Project, Bina Enerji Retrofiti Için Paydaş-Temelli Bir Akıllı Sistem, 2018 2020
- XI. SÜRER E., ERGÜN O., GÜRSEL DİNO İ., Project Supported by Higher Education Institutions, Mimarlık Eğitiminde Karma Gerçeklik Etkileşimi ve Ciddi Oyun Uygulaması, 2018 - 2019
- XII. GÜRSEL DİNO İ., SÜRER E., AKIN Ş., Project Supported by Higher Education Institutions, Karma Gerçeklik (KG) ile BIM-Temelli Sürdürülebilir Mimari Tasarım Ortamı Geliştirilmesi, 2018 2019
- XIII. Savaş Sargin A., Gürsel Dino I., Project Supported by Private Organizations in Other Countries, METU Faculty of Architecture Conservation Planning, 2017 2019
- XIV. GÜRSEL DİNO İ., MERAL Ç., Project Supported by Higher Education Institutions, İklim Değişikliği Bağlamında Bina Tasarım Desteği Geliştirilmesi, 2017 2017
- XV. GÜRSEL DİNO İ., Project Supported by Higher Education Institutions, Performans temelli bina tasarımında bütünleşik performans analiz araç ve yöntemlerinin araştırılması, 2013 2015

### Activities in Scientific Journals

- I. Smart and Sustainable Built Environment (SASBE), Committee Member, 2020 Continues
- II. Metu Journal Of The Faculty Of Architecture, Committee Member, 2016 Continues
- III. Mimarlar Odası Dosya, Committee Member, 2018 2022

## Memberships / Tasks in Scientific Organizations

I. MÜHENDİSLİK ARAŞTIRMA DESTEK GRUBU (MAG), Member of Advisory Board, 2023 - Continues, Turkey

### Scientific Refereeing

- I. EU Supported Other Project, CETP, Belgium, December 2023
- II. ENGINEERING, CONSTRUCTION AND ARCHITECTURAL MANAGEMENT, SCI Journal, July 2021
- III. COGNITIVE NEURODYNAMICS, Journal Indexed in SCI-E, November 2019
- IV. SUSTAINABLE CITIES AND SOCIETY, Journal Indexed in SCI-E, September 2019
- V. AUTOMATION IN CONSTRUCTION, SCI Journal, September 2019
- VI. APPLIED THERMAL ENGINEERING, Journal Indexed in SCI-E, June 2019
- VII. ENGINEERING CONSTRUCTION AND ARCHITECTURAL MANAGEMENT, Journal Indexed in SCI-E, October 2018

### Tasks In Event Organizations

- I. Gürsel Dino İ., Sürer E., Immersive and Responsive Environments, Workshop Organization, Ankara, Turkey, Kasım 2018
- II. Gürsel Dino I., Sürer E., Immersive and Responsive Performative Architectural Design in Mixed Reality, Workshop Organization, Lisbon, Portugal, Haziran 2018
- III. Sorguç A., Gürsel Dino İ., Aggregated Workshop , Workshop Organization, Ankara, Turkey, Mayıs 2013
- IV. Sorguç A., Gürsel Dino İ., Vogler V., Parametric Design Workshop: Design with Light, Workshop Organization, Ankara, Turkey, Kasım 2011

### **Mobility Activity**

I. Erasmus Programme, Staff Mobility, Universidade de Lisboa, Portugal, 2018 - 2018

#### Metrics

Publication: 92 Citation (WoS): 305 Citation (Scopus): 544 H-Index (WoS): 9 H-Index (Scopus): 12

### Congress and Symposium Activities

I. 36th CIB W78 2019 Conference, Attendee, Newcastle-Upon-Tyne, United Kingdom, 2019

### **Invited Talks**

- I. Computer vision for performance-based architectural design, Seminar, Yasar University, Turkey, December 2019
- II. Design Computing in Architecture, Seminar, Gazi University, Turkey, October 2019

# **Coaching Duties**

### **Refereeing Duties**