

## Res. Asst. MURAT ALTUN

### Personal Information

Office Phone: [+90 210 542 22](tel:+9021054222)

Email: [mualtun@metu.edu.tr](mailto:mualtun@metu.edu.tr)

Web: <https://blog.metu.edu.tr/mualtun/>

### Education Information

Doctorate, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, Turkey 2015 - Continues

Postgraduate, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, Turkey 2012 - 2015

Undergraduate Double Major, Middle East Technical University, Faculty of Engineering, Department of Industrial Engineering, Turkey 2009 - 2013

Undergraduate, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, Turkey 2007 - 2012

### Dissertations

Postgraduate, Model based building energy optimization using meta-heuristics, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2015

### Research Areas

Evolutionary Computing, Neural Networks, Informatics in Construction Management, Construction Management, Optimization Theory and Methods

### Academic Titles / Tasks

Research Assistant, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2014 - Continues

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

- I. **Effect of envelope insulation on building heating energy requirement, cost and carbon footprint from a life-cycle perspective**  
ALTUN M., Akgul Ç., Akcamete A.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.35, no.1, pp.147-163, 2020 (Journal Indexed in SCI)
- II. **A modified approach to cross entropy method: Elitist stepped distribution algorithm**  
Altun M., Pekcan O.  
APPLIED SOFT COMPUTING, vol.58, pp.756-769, 2017 (Journal Indexed in SCI)

## Articles Published in Other Journals

- I. **A mixed integer programming method for multi-project resource leveling**  
ALTUN M., SÖNMEZ R., AKÇAMETE GÜNGÖR A.  
Journal of Construction Engineering, Management Innovation, vol.3, no.2, pp.131-140, 2020 (Refereed Journals of Other Institutions)
- II. **Dış sıcaklık verisinin bina ısıtma enerji gereksinimine etkisinin ve TS 825 derece-gün bölge kümelenmesinin geçerliliğinin incelenmesi**  
ALTUN M., AKÇAMETE GÜNGÖR A., AKGÜL Ç.  
Pamukkale Üniversitesi Mühendislik Bilimleri Dergisi, 2020 (Refereed Journals of Other Institutions)
- III. **Investigation of the effect of outdoor temperature data on the building heating energy requirement and validity of the TS 825 degree-day region clustering**  
ALTUN M., AKÇAMETE GÜNGÖR A., AKGÜL Ç.  
PAMUKKALE UNIVERSITY JOURNAL OF ENGINEERING SCIENCES-PAMUKKALE UNIVERSİTESİ MUHENDİSLİK BİLİMLERİ DERGİSİ, vol.26, no.6, pp.1062-1075, 2020 (Journal Indexed in ESCI)

## Books & Book Chapters

- I. **A Hybrid Cuckoo Search Algorithm for Cost Optimization of Mechanically Stabilized Earth Walls**  
Altun M., Yalcin Y., Pekcan O.  
in: Applications of Cuckoo Search Algorithm and its Variants, Nilanjan Dey, Editor, Springer, London/Berlin , Singapore, pp.277-306, 2020

## Refereed Congress / Symposium Publications in Proceedings

- I. **Application of TS 825 Turkish thermal insulation standard using BIM**  
Altun M., Akçamete Güngör A.  
International Civil Engineering Architecture Conference (ICEARC 2019), Trabzon, Turkey, 17 - 20 April 2019, pp.314-323
- II. **Multi-Project Multi-Resource Leveling Using Mixed Integer Programming**  
ALTUN M., SÖNMEZ R., AKÇAMETE GÜNGÖR A.  
IPCMC2018, 16 - 18 November 2018
- III. **A Method for Facilitating 4D Modeling by Automating Task Information Generation and Mapping**  
ALTUN M., AKÇAMETE GÜNGÖR A.  
35th CIB W78 2018 Conference IT in Design, Construction, and Management, Chicago, United States Of America, 1 - 03 October 2018
- IV. **Analysis of Slopes Using Elitist Differential Evolution Algorithm**  
YALÇIN Y., ALTUN M., PEKCAN O.  
6th International Conference on Engineering Optimization, Lizbon, Portugal, 17 - 19 September 2018
- V. **Application of Artificial Neural Networks on Building Energy Estimation**  
ALTUN M., ERSÖZ A. B. , TEKE T., KURT T., AKÇAMETE GÜNGÖR A., PEKCAN O.  
International Conference on Engineering Technologies, Konya, Turkey, 7 - 09 December 2017
- VI. **Kaynak Dengeleme Problemine Öncelikli Diferansiyel Evrim Algoritmasıyla Bir Yaklaşım**  
ALTUN M., SÖNMEZ R., AKÇAMETE GÜNGÖR A.  
4. Proje ve Yapım Yönetimi Kongresi, Eskişehir, Turkey, 3 - 05 November 2016
- VII. **Yapı Bilgi Modellemesi Tabanlı Bina Enerji Optimizasyonu**  
ALTUN M., AKÇAMETE GÜNGÖR A.  
4. Proje ve Yapım Yönetimi Kongresi, Eskişehir, Turkey, 3 - 05 November 2016
- VIII. **BIM based Multi Objective Building Life Cycle Energy Performance Evaluation Using Particle Swarm Optimization**  
ALTUN M., AKÇAMETE GÜNGÖR A.

CIB W78 conference 2015, 27 - 29 October 2015

- IX. **Yapay ArıKolonisi Algoritmasının Zaman-MaliyetÖdünleşim Problemlerine Uygulanması**  
ALTUN M., AKÇAMETE GÜNGÖR A.  
3.Proje ve Yapım Yönetimi Kongresi, Turkey, 6 - 08 November 2014, pp.708-719
- X. **Economic Performance Analysis of Turkish Airports 2002-2009**  
Altun M., Pekcan O.  
1st International Aviation Management Conference, Ankara, Turkey, 7 - 08 December 2012

## **Scientific Refereeing**

APPLIED SOFT COMPUTING, SCI Journal, July 2020

## **Citations**

Total Citations (WOS):12

h-index (WOS):2

## **Scholarships**

2210-National Scholarship Programme for MSc Students, TUBITAK, 2012 - 2014

## **Awards**

Altun M., Best Presenter, "International Conference On Engineering Technologies 2017" Konferansı Bilim Komitesi, April 2017