**1. Name, Surname, Title :** Mustafa Emre İlal, Associate Professor

**2. Education Credentials :**

|  |  |  |  |
| --- | --- | --- | --- |
| **Degree** | **Department** | **University** | **Year** |
| B. Arch. | Architecture | Yıldız Technical University | 1993 |
| M. Arch. | Architecture | Carnegie Mellon University | 1996 |
| PhD | Architecture | Carnegie Mellon University | 2001 |

**3. Academic Experience :**

|  |  |  |  |
| --- | --- | --- | --- |
| **Title** | **Department** | **University/Place** | **Year** |
| Research Assistant | Architecture | Carnegie Mellon University | 1997-2001 |
| Research Assistant | Architecture | Balıkesir University | 1994-2002 |
| Assistant Professor | Architecture | Balıkesir University | 2002-2010 |
| Assistant Professor | Architecture | Izmir Institute of Technology | 2010-2012 |
| Associate Professor | Architecture | Izmir Institute of Technology | 2012- |

**4. Areas of Expertise in Architecture**

* Building Performance
* Architectural Acoustics
* Information Technologies and Computation

**5. Courses Taught (Last Two Years)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Academic Year** | **Semester** | **Code** | **Name of Course** | **Weekly Hours** | | **Number of Students** |
| Theory | Application |
| 2018-2019 | Fall | AR201 | Architectural Design I | 4 | 8 | 17 |
| AR381 | Building Physics II | 2 | 2 | 80/2 |
| AR581 | Principles of Building Physics | 2 | 2 | 4/4 |
| AR594 | Programming Fundamentals for Computational Design | 3 | 0 | 11 |
| Spring | AR164 | Computer Applications for Designers | 1 | 2 | 128 |
| AR302 | Architectural Design IV | 4 | 8 | 17 |
| 2019-2020 | Fall | AR201 | Architectural Design I | 4 | 8 | 14 |
| AR381 | Building Physics II | 2 | 2 | 108/2 |
| AR581 | Principles of Building Physics | 2 | 2 | 13/4 |
| AR590 | Integrated Design and Building Information Modeling | 2 | 2 | 13 |
| AR594 | Programming Fundamentals for Computational Design | 3 | 0 | 6 |
| Spring | AR164 | Computer Applications for Designers | 1 | 2 | 108/2 |
| AR352 | Building Technology and Science V | 2 | 2 | 87/3 |
| AR587 | Architectural Acoustics | 3 | 0 | 2 |

**6. Supervised Graduate Theses / Dissertations**

**6.1. Masters**

Yöney, E.G. "Effect of Natural Wall Materials on Energy Consumption in Continental and Mediterranean Climates", Izmir Institute of Technology, Architecture, 2019

Politi, R.R. "Project planning and management using building information modelling (BIM)", Izmir Institute of Technology, Civil Engineering, 2018 (co-supervisor)

Gerçek, B. "BIM execution process of construction companies for building projects", Izmir Institute of Technology, Architecture, 2016

Atça, E. "Acoustic design based on multi-aspect performance analysis", Izmir Institute of Technology, Architecture, 2013

Macit, S. "Bilgisayar destekli mimari tasarım sistemlerinden bir hacim akustiği analiz yazılımına IFCXML ile veri aktarımı", Balıkesir University, Architecture, 2007

**6.2. PhD**

Demir Altıntaş, Y. "A method for GIS and BIM integration to support automated zoning code compliance checking", Izmir Institute of Technology, Architecture, 2020

Sevinç Karcı, Z. "A model for prediction of noise levels in open plan offices based on number of occupants", Izmir Institute of Technology, Architecture, 2020

Çakır, O. "A model for assessing acoustic comfort in enclosed public spaces", Izmir Institute of Technology, Architecture, 2019

Başarır, L. "A model based on occupant movement analysis for spatial layout evaluation", Izmir Institute of Technology, Architecture, 2018

**7. Publications**

**7.1. Articles published in international referred journals (SCI, SSCI, Arts and Humanities, Area Indexed)**

Başarır, L., İlal, M.E. "Occupant trajectory analysis for evaluating spatial layouts", ITU Journal of the Faculty of Architecture, v.17(2):143-157, 2020

İlal, M.E., Kale, S., Yavaş, A. "Incorporating the Collaborative Aspect into Design Education Establishing the required technological infrastructure for an interdisciplinary collaboration", Arkitekt, v.2008(5):42-49, 2008

İlal. M.E. "The Quest for Integrated Design System A Brief Survey of Past and Current Efforts", METU Journal of the Faculty of Architecture, v.24(2):149-158, 2007

**7.2. Articles published in other international refereed journals**

Çakır, O., Sevinç, Z., İlal, M.E. "Characterization of Noise in Eating Establishments Based on Psychoacoustic Parameters", Applied Mechanics and Materials, v.887:539-546, 2019

**7.3. Papers presented in international conferences and published as proceedings**

Demir Altıntaş Y. – İlal M.E. (2018). Modeling of Zoning Information in GIS for Automated Code Checking. 5th International Project and Construction Management Conference (IPCMC 2018), 16-18 Kasım 2018, Kıbrıs.

MACİT İLAL S. – İLAL M.E. (2018). Bridging the Information Gap Between BIM and Building Codes: A Practical Approach Utilizing IFC Property Sets. 5th international Project and Construction Management Conference (IPCMC2018), 16-18 Kasım 2018, Kıbrıs.

Politi R.R. – Aktaş E. – İlal M.E. (2018). Project Planning and Management Using Building Information Modeling (BIM). 13th International Congress on Advances in Civil Engineering, 12-14 Eylül 2018, İzmir.

Yöney, E. – İlal, M.E. – Durmuş Arsan, Z. (2018). Data Transfer from Building Information Modeling Software to Energy Analysis Tools: Two Alternative Methods. AES 2018: 4th Anatolian Energy Symposium with International Participation, 18-20 Nisan 2018, Edirne.

Çakır, O. – Sevinç, Z. – İlal, M.E. (2017). Characterization of Noise in Eating Establishments Based on Psychoacoustic Parameters, The 12th International Buildings and Environment Conference - enviBUILD 2017, 7-8 Eylül 2017, Viyana.

Gerçek, B. – Tokdemir, O.B. – İlal, M.E. – Günaydın, H.M. (2017). BIM Execution Process Of Construction Companies For Building Projects, Ninth International Structural Engineering and Construction Conference, 24-29 Temmuz 2017, Valensiya, Doi: 10.14455/ISEC.res.2017.5

Macit, S. – İlal, M.E. – Suter, G. – Günaydın, H.M. (2015). A Hybrid Model for Building Code Representation Based on Four-Level and Semantic Modeling Approaches, CIB W78 Konferansı, 27-29 Ekim 2015, Eindhoven.

Atça E. - İlal, M.E. - Başaran, T. – Kazanasmaz, T. - Durmuş Arsan, Z. (2013): Renovating a lecture hall with a glass roof: A case study for performance based design, Central European Symposium on Building Physics 2013 Proceedings, Vienna, Austria, September 9-11, 2013

Macit, S. – Suter, G. – İlal, M.E. – Günaydın M. (2013): İzmir Municipality Housing and Zoning Code Analysis and Representation for Compliance Checking, Proceedings of 20th International Workshop of the European Group on Intelligent Computing in Engineering (eg-ICE 2013), Vienna, Austria, July 2013

Çakır, O. – İlal, M.E. (2012): An Investigation Of User Attitudes Towards Public Spaces Without Background Music, Proceedings of International Congress on Architecture-1, Konya, Turkey, November 15-17, 2012

İlal, M.E. (2009): The Building Performance Perspective for Interoperability. eCAADe 2009, Proceedings of the 27th Conference on Education and Research in Computer Aided Architectural Design in Europe, Istanbul, Turkey, September 16-19, 2009, 89-94.

İlal, M.E. - Kale, S. – Yavaş, A. (2009): Introducing Interdisciplinary Collaboration into Design Curriculum. eCAADe 2009, Proceedings of the 27th Conference on Education and Research in Computer Aided Architectural Design in Europe, Istanbul, Turkey, September 16-19, 2009, 129-136.

İlal, M.E. (2009): A Comparison of Heuristic Optimization Techniques for Acoustic Material Selection. IBPC 2009, Proceedings of the 4th International Building Physics Conference, Istanbul, Turkey, June 15-18, 2009, 641-645.

Kale, S. – İlal, M.E. (2009): A Comparison of Tabu Search, Simulated Annealing and Genetic Algorithms for Discrete Time-Cost-Quality Trade-Off Analysis. CITC-V, Proceedings of the Fifth International Conference on Construction in the 21st Century “Collaboration and Integration in Engineering, Management and Technology”, Istanbul, Turkey, May 20-22, 2009, 1199-1208.

İlal, M.E. - Macit, S. (2007): Parametric Analysis Support for Architectural Room Acoustics Education. Inter-Noise 2007, Proceedings of the 36th International Congress and Exhibition on Noise Control Engineering, Istanbul, Turkey, August 28-31 2007.

İlal, M.E. - Macit, S. (2007): Interoperability for Building Performance Software. LIVENARCH III Contextualism in Architecture, 3rd International Congress on Liveable Environments and Architecture, Trabzon, Turkey, July 5-7 2007, 975-984.

İlal, M.E. - Macit, S. (2007): Integration of an Acoustic Simulation Tool with CAAD Environments using ifcXML. Enterprise Interoperability II, 3rd International Conference on Interoperability for Enterprise Software and Applications, Madeira, Portugal, March 2007, 807-810.

Lam K.P. - Mahdavi, A. - Brahme, R. - Kang, Z.J. - İlal, M.E. - Wong, N.H. - Gupta, S. - Au, K.S. (2001): Distributed Web-based building performance computing: A Singapore-US collaborative effort. International IBPSA Conference, Rio de Janeiro, Brazil, August 2001, 808-814.

Mahdavi, A. - Lam, K.P. - Ilal, M.E. - Wong, N.H. (2000): A Multi-Institutional Initiative for Distributed Collaborative Performance-Based Building Design. Proceedings of Focus Symposium on World Wide Web as a Framework for Collaboration - InterSymp-2000, 12th International Conference on Systems Research, Informatics and Cybernetics, July 31-August 4, 2000, Baden-Baden, Germany ISBN 0-921836-88-0, 215 – 223.

Mahdavi, A. - Ilal, M. E. - Mathew, P. - Ries, R. – Suter, G. (1999): Aspects of S2. Proceedings of CAADfutures 99 Conference, Atlanta, GA, USA, 185 – 196.

Mahdavi, A. - Ilal, M. E. - Mathew, P. - Ries, R. - Suter, G. - Brahme, R. (1999): The Architecture of S2. Proceedings of the IBPSA (International Building Performance Simulation Association) Building Simulation ‘99 Conference, Kyoto, Japan. Vol.III, 1212 – 1226.

Menzel, K. - Hartkopf, V. - Ilal, M. E. (1999): Project Centered, International, Interdisciplinary Collaborative Teaching in Architecture, Engineering and Construction. Proceedings of the Sixth International Conference of the European Society for Engineering Education, Winterthur and Zurich, Switzerland, September 1999. ISBN 3-7281-2524-5, 285-290.

Mahdavi, A. - Cho, D. - Ries, R. – Chang, S. - Pal, V. - Ilal, M. E. - Lee, S. - Boonyakiat, J. (1999): A building performance signature for the "Intelligent Workplace". Proceedings of the CIB Working Commission W098 International Conference: Intelligent and Responsive Buildings. Brugge, Belgium. ISBN 9076019096, 233 - 240.

Menzel, K. - Ilal, M. E. - Hartkopf, V. (1998): The Use of Groupware and Telecommunication in the A/E/C-Industry - Illustrated through an Interdisciplinary, Multi-National, Project-Centered Teaching Effort. Proceedings of the Fifth Congress on Computing in Civil Engineering, 850-85, American Society of Civil Engineers: Boston, MA/ New York, NY, USA.

Mahdavi, A. - Liu, G. - Ilal, M. E. (1997): CASCADE: A Novel Computational Design System for Architectural Acoustics. IBPSA (International Building Performance Simulation Association) Conference, Prague, Czech Republic. Vol. II, 173 - 180.

Mahdavi, A. - Liu, G. - Hartkopf, V. – Ilal, M. E. (1996): An Integrated Computational Room Acoustics Design System; Part II: Implementation Approach and Preliminary Results. Proceedings of NOISE-CON 96 (The 1996 National Conference on Noise Control Engineering). Bellevue, WA, USA, 797 - 802.Surname, N. “Title”, Year…

**7.4. International books or chapters**

Çakır, O., İlal, M.E. "Evaluation of Eating Establishments through Questionnaires and Psychoacoustic Parameters", in Design and Engineering: Sustainability, Innovation and Production, Frontpage Publications, 2019

Sevinç, Z., İlal, M.E. "Noise Level Prediction in Study Environments", in Design and Engineering: Sustainability, Innovation and Production, Frontpage Publications, 2019

Demir Altıntaş, Y., İlal, M.E. "BIM – GIS Data Integration: Review on the Methods for Interoperability", in Design and Engineering: Sustainability, Innovation and Production, Frontpage Publications, 2019

Menzel, K., Hartkopf, V., İlal, M.E. "Collaborative Design and Learning Competence Building for Innovation", in Collaborative Learning and Design in Architecture Engineering and Construction, Greenwood, 2004

**7.5. Articles published in national refereed journals**

Karaman, E. - Kale, S. - İlal, M.E. (2006): İnşaat Projelerinde Süre Planlaması: Bir Bulanık Küme Yaklaşımı. Yapı Dünyası (ISSN:1300-977X), Mayıs 2006, 11-18.

Kale, S. - İlal, M.E. - Macit, S. (2005): Dört Boyutlu Bilgisayar Destekli Tasarım Teknolojisi (4D CAD). CAD-CAM Dizayn (ISSN:1305-3698), August-September 2005, 90-94.

Kale, S. - İlal, M.E. - Çivici, T. (2005): Bilişim Teknolojilerinin Mimarlık Meslek Pratiğinde Kullanımı. Ege Mimarlık (ISSN:1301-9694), 2005/2-54, 15-19.

Kale, S. - İlal, M.E. - Macit, S. (2005): Yeni Nesil Bilgisayar Destekli Tasarım Teknolojisi (4B-BDT). Dünya İnşaat (ISSN:1301-2371), Temmuz 2005, 92-94.

Kale, S. – Oral, A. – İlal, M.E. (2005): Mühendislik Eğitiminde Bilişim Teknolojilerinin Kullanımı ve Kullanımı Etkileyen Faktörler. CAD-CAM Dizayn (ISSN:1305-3698), Haziran 2005, 68-73

**7.6. Papers presented in national conferences and published as proceedings**

Demir Altıntaş, Y. - İlal, M.E. (2018): Yapı Bilgi Modelleme ve Coğrafi Bilgi Sistemlerinin Kesişiminde İmar Yönetmeliği Uyumluluk Denetimi, XII. Mimarlıkta Sayısal Tasarım Ulusal Sempozyumu MSTAS, 21-22 Haziran 2018, Isparta.

Çakır, O. - İlal M.E. (2017): Farklı İşlevler Barındıran Kapalı Alanlara Ait Ses Peyzajlarının Psikoakustik Parametrelerle Karşılaştırılması, 12. Ulusal Akustik Kongre ve Sergisi, 14-15 Eylül 2017, İzmir.

Sevinç, Z. - İlal M.E. (2017): Yemekhane Ses Peyzajının Psikoakustik Parametreler Açısından Değerlendirilmesi, 12. Ulusal Akustik Kongre ve Sergisi, 14-15 Eylül 2017, İzmir.

Çakır, O. - İlal M.E. (2017): Ortak Mekanlarda Kullanıcı Sayısına Bağlı Olarak Gürültü Seviyeleri, 13. Ulusal Tesisat Mühendisliği Kongresi (Teskon), 19-22 Nisan 2017, İzmir.

Gerçek B. - İlal M.E. - Tokdemir O.B. - Günaydın H.M. (2016). Yapı Bilgi Modellemesi Yardımıyla Metraj ve Maliyet Hesabı. 4. Proje ve Yapım Yönetimi Kongresi, 3-5 Kasım 2016, Eskişehir.

Sevinç, Z. - Çakır, O. – İlal, M.E. (2015): Türkiye’deki İç Mimarlık Eğitiminde Yapı Fiziği Dersleri, 3.Ulusal İç Mimarlık Eğitimi Kongresi İÇMEK, 5-6 Kasım 2015, İstanbul Kültür Üniversitesi, İstanbul.

Çakır, O. – Sevinç, Z. - İlal, M.E. (2014): Türkiye’de Mimarlık Eğitiminde Akustik: Güncel Durum, 1.Ulusal Yapı Fiziği ve Çevre Kontrolü Kongresi, 13-14 Mart 2014, İTÜ Mimarlık Fakültesi, İstanbul

Çakır, O. – İlal, M.E. (2013): Ortak Kullanım Alanlarında Fon Müziğinin ve Müziksizliğin Anketler Üzerinden Karşılaştırmalı Değerlendirilmesi. 10. Ulusal Akustik Kongre ve Sergisi, 16-17 Aralık 2013, YTÜ, İstanbul

Macit, S. – Suter, G. – İlal, M.E. – Günaydın M. (2013): Yapı Projelerinin İlgili Yönetmeliklere Uygunluk Denetimi – Otomatik Denetleme Sistemleri, 7. Mimarlıkta Sayısal Tasarım Sempozyumu, İTÜ Mimarlık Fakültesi Haziran 2013

Atça, E. - İlal, M.E. - Başaran, T. – Kazanasmaz, T. - Durmuş Arsan, Z. (2013): Başarım Odaklı Tasarım: Tasarımın Erken Evrelerinde Benzetim Araçlarının Önemi, 11. Ulusal Tesisat Mühendisliği Kongresi – 17-20 Nisan 2013, İzmir.

Ülkeryıldız, E. - İlal, M.E. – Kale, S. (2011): İnşaat Firmalarının İş Güvenliği Başarım Düzeyinin Ölçülmesine Yönelik Entropi Tabanlı Bir Model. 3. İşçi Sağlığı ve İş Güvenliği Sempozyumu, 21-23 Ekim 2011, Çanakkale, s. 169-182.

Macit, S. – İlal, M.E. – Günaydın, H.M. (2010): Yapı Projelerinin Yönetmeliklere Uygunluk Denetimi için Kural Tabanlı Sistemler. 1. Proje ve Yapım Yönetimi Kongresi 29 Eylül-1Ekim 2010, ODTÜ Kültür ve Kongre Merkezi, Ankara, s. 605-616.

İlal, M.E. – Ülkeryıldız, E. – Kale, S. – Palabıyık, S. (2010): Tavlama Benzetimi Yaklaşımı ile Üniversite Yerleşkelerinin Planlanması. 1. Proje ve Yapım Yönetimi Kongresi 29 Eylül-1Ekim 2010, ODTÜ Kültür ve Kongre Merkezi, Ankara, s. 617-629.

**7.7. National books or chapters**

**7.8. Other Publications**

İlal, M.E. – Yılmaz, S. – Güney, İ.A. – Canaran, D. – Çakır, O. – Öztürk, Y. (Editörler) (2017): 12. Ulusal Akustik Kongresi Bildiriler Kitabı, Paco Grafik, ISBN: 9789756590102.

Çakır, O. – Doğan, F. – Erbil Altıntaş, L. – Gündüz, C. – İlal, M.E. – Taneri, B. (Editörler) (2014): 8. Mimarlıkta Sayısal Tasarım Ulusal Sempozyumu Bildiriler Kitabı, Paco Grafik, ISBN: 9789756590065.

**8. Scientific Research Projects**

**9. Administrative Duties**

|  |  |  |
| --- | --- | --- |
| **Name of Duty** | **University** | **Year** |
| Vice Dean | Izmir Institute of Technology /  Faculty of Architecture | 2014-2016 |
| Vice Head of Department | Balıkesir University /  Department of Architecture | 2007-2010 |
| Head of Division | Balıkesir University / Department of Architecture /  Building Science Division | 2006-2010 |

**10. Memberships / Fellowships**

Chamber of Architects of Turkey (Istanbul)

Turkish Acoustical Society

**11. Awards**

**12. Other (Design, Art, or related Events involved)**