

Asst. Prof. Michael Stefan Bittermann

Personal Information

Email: bittermann@itu.edu.tr

Web: <https://web.itu.edu.tr/bittermann>

Address: İstanbul Teknik Üniversitesi Mimarlık Fakültesi, Taşkışla Kampüsü, Taksim 34437, İstanbul Türkiye

Education Information

Doctorate, Technische Universiteit Delft, Architecture, Design Informatics, Netherlands 2005 - 2009

Postgraduate, Technische Universiteit Delft, Architecture, Architecture, Netherlands 2001 - 2003

Undergraduate, Technische Universiteit Delft, Architecture, Architecture, Netherlands 1997 - 2001

Foreign Languages

English, C2 Mastery

Research Areas

Architecture, Building Information, Architectural Design, Engineering and Technology

Academic Titles / Tasks

Associate Professor, Istanbul Technical University, Mimarlık, Mimarlık, 2018 - Continues

Assistant Professor, Maltepe University, Architecture, Architecture, 2014 - 2018

Research Assistant PhD, Technische Universiteit Delft, Architecture, Architecture, 2010 - 2014

Academic and Administrative Experience

Courses

Visual Communication II: Visualization and Perspective, Undergraduate, 2017 - 2018

Applied Statistics, Postgraduate, 2017 - 2018

Computational Cognition, Postgraduate, 2017 - 2018

Statistics for Research and Design, Undergraduate, 2017 - 2018

Building Materials and Components II, Undergraduate, 2016 - 2017

Computational Design, Undergraduate, 2016 - 2017

Design Studio VI, Undergraduate, 2016 - 2017

Design Studio V, Undergraduate, 2016 - 2017

Design Studio VI, Undergraduate, 2014 - 2015, 2015 - 2016

Computational Design, Undergraduate, 2015 - 2016

Design Studio V, Undergraduate, 2015 - 2016

Architectural Informatics, Undergraduate, 2014 - 2015, 2015 - 2016

Architectural Informatics, Undergraduate, 2013 - 2014, 2014 - 2015
Design Studio VII, Undergraduate, 2014 - 2015
Design Studio VI, Undergraduate, 2013 - 2014
Design Project I and Design Project II, Postgraduate, 2013 - 2014, 2014 - 2015

Advising Theses

Bittermann M. S. , Freeform Follows Functions, Postgraduate, D.Smidt(Student), 2014
Bittermann M. S. , An Inside to Outside Approach: Focussing on Parametric Pattern Generation for Spatial Organization, Satisfying Experiential Demands, Postgraduate, A.Momin(Student), 2013
Bittermann M. S. , Computational Architecture: Focusing on the Structural and Layout Complexity, Postgraduate, I.Zaratiegui(Student), 2013
Bittermann M. S. , Computational Architecture: Focusing on Perception and Functionality Aspects of Urban Intervention., Postgraduate, E.Varaku(Student), 2013
Bittermann M. S. , An Art Museum Hub for Den Haag, Postgraduate, A.Riazibeidokhti(Student), 2013
Bittermann M. S. , Evolutionary Computation and Parametric Pattern Generation for Airport Terminal Design, Postgraduate, I.Chatzikonstantinou(Student), 2011
Bittermann M. S. , Focusing on Spatial Composition and Influence of Building Envelope on Daylight Aspects in an Art Center, Postgraduate, M.Foolady(Student), 2011

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Insight into color aesthetics from probabilistic perception modeling**
Bittermann M. S.
COLOR RESEARCH AND APPLICATION, vol.43, no.4, pp.527-543, 2018 (Journal Indexed in SCI)
- II. **Visual perception in design and robotics**
Bittermann M. S. , Sariyildiz I. S. , Ciftcioglu O.
INTEGRATED COMPUTER-AIDED ENGINEERING, pp.73-91, 2007 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **Precision evolutionary optimization part II: Implementation and applications.**
Bittermann M. S. , Akinci T. C. , Caglar R.
The Journal of Cognitive Systems, no.1, pp.10-18, 2016 (International Refereed University Journal)
- II. **Probabilistic sorting for effective elitism in multi-objective evolutionary algorithms**
Seker S. S. , Bittermann M. S. , Caglar R., Datta R.
The Journal of Cognitive Systems, no.1, pp.19-28, 2016 (International Refereed University Journal)
- III. **Note on the Information-Theoretic Aspect of Fuzzy Neural Tree**
Ciftcioglu O., Bittermann M. S.
The Journal of Cognitive Systems, no.1, pp.37-40, 2016 (International Refereed University Journal)
- IV. **From perceptual towards cognitive robotics in the framework of evolutionary computation**
Ciftcioglu O., Bittermann M. S.
International Journal of Factory Automation, Robotics and Soft Computing, pp.165-180, 2009 (Refereed Journals of Other Institutions)
- V. **Visual perception model for architectural design**
Bittermann M. S. , Ciftcioglu O.
Journal of Design Research, pp.35-60, 2008 (Refereed Journals of Other Institutions)
- VI. **Visual perception theory underlying perceptual navigation**

CIFTCIOGLU O., BITTERMANN M. S. , SARIYILDIZ S.

INTERNATIONAL JOURNAL OF FACTORY AUTOMATION, ROBOTICS AND SOFT COMPUTING, pp.171-185, 2007
(Refereed Journals of Other Institutions)

VII. Multiresolutional fusion of perceptions applied to robot navigation

Ciftcioglu O., Bittermann M. S. , Sariyildiz I. S.

Advanced Computational Intelligence and Intelligent Informatics (JACIII), no.11, pp.688-700, 2007 (Journal Indexed in ESCI)

Supported Projects

Bittermann M. S. , Project Supported by Higher Education Institutions, Interactive Computational Design, 2018 - 2020

Bittermann M. S. , TUBITAK Project, Design by Cognition and Comprehension, 2014 - 2015

Bittermann M. S. , Other Supported Projects, User Centered Energy Reduction, 2012 - 2014

Bittermann M. S. , Other Supported Projects, Energy Neutral Neighborhood Engine - ENNE, 2011 - 2013

Bittermann M. S. , Other Supported Projects, iBuild Green (framework: KIC Innoenergy - Knowledge & Innovation Community), 2010 - 2013

Bittermann M. S. , Other Supported Projects, Neuro-Fuzzy Modeling for Sustainable Housing Design in Rijswijk Zuid, The Netherlands, 2010 - 2011

Bittermann M. S. , EU Framework Program Project, Performance Assessment for a Sustainable Urban Expansion in Groningen, The Netherlands, 2009 - 2009

Activities in Scientific Journals

The Journal of Cognitive Systems, Editor, 2016 - Continues

Scientific Refereeing

Proc. of IEEE Congress on Evolutionary Computation 2017, Scientific / Professional Book Published by Renowned Publishing Houses, July 2017

Proc. of IEEE World Congress on Computational Intelligence WCCI 2016, Scientific / Professional Book Published by Renowned Publishing Houses, July 2016

Proc. of IEEE Congress on Evolutionary Computation 2015, Scientific / Professional Book Published by Renowned Publishing Houses, June 2015

Advanced Engineering Informatics (Elsevier), SCI Journal, June 2014

Proc. of 31st Int. Conf. on Education and research in Computer Aided Architectural Design in Europe (eCAADe), Scientific / Professional Book Published by Other Publishers, September 2013

March 2012

Proc. 3rd Int. Con. on Innovation in Architecture, Engineering and Construction, Scientific / Professional Book Published by Other Publishers, June 2005

Scientific Research / Working Group Memberships

Technical Design & Informatics (Technisch Ontwerp & Informatica), Technische Universiteit Delft, Netherlands, <http://toi.bkt.tudelft.nl>, 2005 - 2014

Hyperbody Research Group, Technische Universiteit Delft, Netherlands, www.hyperbody.nl, 2001 - 2003

Edit Congress and Symposium Activities

Maltepe University International Student Congress - MUISCarch 2017, Moderator, İstanbul, Turkey, 2017
Maltepe University International Student Congress - MUISCarch 2017, Panelists, İstanbul, Turkey, 2017
Maltepe University International Student Congress - MUISCarch 2016, Moderator, İstanbul, Turkey, 2016
Maltepe University International Student Congress - MUISCarch 2014, Moderator, İstanbul, Turkey, 2014
Sayısal Tasarım Sempozyumu (Symp. on Computational Design), Invited Speaker, İzmir, Turkey, 2012
Welcome Symposium for Prof. Dr. M. Braungart at Delft University of Technology, Invited Speaker, Rotterdam, Netherlands, 2011
Decision Support Systems for Sustainable Buildings symposium, Invited Speaker, Rotterdam, Netherlands, 2010
Complexity Theories of Cities have come of Age, Invited Speaker, Rotterdam, Netherlands, 2009
Game Set & Match II - Computer Games, Advanced Geometries and Digital Technologies, Moderator, Rotterdam, Netherlands, 2006
Digifest 2003, Invited Speaker, Toronto, Canada, 2003

Citations

Total Citations (WOS):4

h-index (WOS):1