

## **Asst. Prof. Michael Stefan Bittermann**

### **Personal Information**

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### **Education Information**

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

Post Graduate, Technische Universiteit Delft, Architecture, Architecture, Netherlands 2001 - 2003

Under Graduate, 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**

Assistant Professor, İstanbul Teknik Üniversitesi, Architecture, Architecture, 2018 - Continues

Assistant Professor, İstanbul Teknik Üniversitesi, Architecture, Architecture, 2018 - 2018

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

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

### **Professional Experience**

#### **Courses**

Visual Communication II: Visualization and Perspective, Under Graduate, 2017 - 2018

Applied Statistics, Post Graduate, 2017 - 2018

Computational Cognition, Post Graduate, 2017 - 2018

Statistics for Research and Design, Under Graduate, 2017 - 2018

Building Materials and Components II, Under Graduate, 2016 - 2017

Computational Design, Under Graduate, 2016 - 2017

Design Studio VI, Under Graduate, 2016 - 2017

Design Studio V, Under Graduate, 2016 - 2017

Design Studio VI, Under Graduate, 2014 - 2015, 2015 - 2016

Computational Design, Under Graduate, 2015 - 2016

Design Studio V, Under Graduate, 2015 - 2016

Architectural Informatics, Under Graduate, 2014 - 2015, 2015 - 2016  
Architectural Informatics, Under Graduate, 2013 - 2014, 2014 - 2015  
Design Studio VII, Under Graduate, 2014 - 2015  
Design Studio VI, Under Graduate, 2013 - 2014  
Design Project I and Design Project II, Post Graduate, 2013 - 2014, 2014 - 2015

## Advising Theses

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

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

- 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.bk.tudelft.nl>, 2005 - 2014

Hyperbody Research Group, Technische Universiteit Delft, Netherlands, [www.hyperbody.nl](http://www.hyperbody.nl), 2001 - 2003

## **Edit Congress and Symposium Activities**

Maltepe University International Student Congress - MUISCarch 2017, Panelists, İstanbul, Turkey, 2017  
Maltepe University International Student Congress - MUISCarch 2017, Moderator, 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):3

h-index (WOS):1