

Hacer İlhan

Department of Mathematics, Hacettepe University
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EDUCATION

Ph.D., Mathematics, Hacettepe University, 2011 – 2018

Thesis: Physics Based Similarity Searches in Motion Capture Databases

Advisor: Prof. Haşmet Gürçay

Co-Advisor: Assoc. Prof. Tolga Çapın

M.Sc., Mathematics, Hacettepe University, 2008 – 2011

Thesis: On the Morphing of Polygonal Regions

Advisor: Prof. Haşmet Gürçay

B.Sc., Department of Mathematics, Hacettepe University, 2002 – 2007

ACADEMIC EXPERIENCE

Research Assistant, 2009 – Present

Department of Mathematics, Hacettepe University

RESEARCH INTERESTS

Computer Graphics, Computer Animation, Data Driven Character Animation, Physics Based Character Animation, Information Search, Motion Retrieval, Motion Reconstruction, Tracking of Human Motion in Video Sequences, Game Technologies, Machine Learning, Deep Learning.

Computer Vision, 3D Visual Tracking, Image Processing.

3D Scientific Visualization, Geological Solid Modeling, Polygon Morphing.

Applied Mathematics.

JOURNAL ARTICLES (SCI / SCI-EXPANDED)

Mehmet C. Mocan, Hacer İlhan, Haşmet Gürçay, Özlem Dikmetaş, Erdem Karabulut, Uğur Erdener, Murat İrkeç, **The Expression and Comparison of Healthy and Ptotic Upper Eyelid Contours Using a Polynomial Mathematical Function**, Current Eye Research, Vol. 39, Iss. 6, 553-560, DOI: 10.3109/02713683.2013.860992, **2014**.

Gökçen Çimen, Hacer İlhan, Tolga Çapın, Haşmet Gürçay, **Classification of human motion based on affective state descriptors**, Computer Animation and Virtual Worlds, Wiley, 24 (3-4), 355-363. DOI: 10.1002/cav.1509, **2013**.

Hacer İlhan, Haşmet Gürçay, **Polygon Morphing and Its Application in Orebody Modeling**, Mathematical Problems in Engineering, vol. 2012, Article ID 732365, 9 pages, DOI: 10.1155/2012/732365, **2012**.

RESEARCH PROJECTS

Data Driven Character Animation, Investigator, 2012 - 2015
TÜBİTAK 1001 Project (112E105)

Development of Mine Automation and Design Software, Investigator, 2009 - 2011
TÜBİTAK - KAMAK 1007 Project (108G036)

CONFERENCES

Hacer İlhan, Haşmet Gürçay, Tolga Çapın, Searching for Similarities with Physical Features in Motion Capture Databases. **EURASIA GRAPHICS 2020: International Conference on Computer Graphics, December 2020**.

Hacer İlhan, Haşmet Gürçay, Tolga Çapın, Similarity Searches in Motion Capture Databases, **Department of Mathematics, University of Florence, Italy, September 2019**.

Zümra Kavafoğlu, Hacer İlhan, Ersan Kavafoğlu, Haşmet Gürçay, Tolga Çapın, Simple Vertical Human Climbing Control with End Effector State Machines, **EURASIA GRAPHICS 2014: International Conference on Computer Graphics, October 2014**.

Hacer İlhan, Zümra Kavafoğlu, Haşmet Gürçay, Poligonlar için Farklı Kesintisiz Dönüşüm Yöntemlerinin Karşılaştırılması, **USMOS 2011, June 2011**.

TEACHING

Introduction to Programming, Data Structures and Algorithms, Object Oriented Programming, Mathematics I, Mathematics II, Advanced Mathematics I, Advanced Mathematics II.

AWARDS

İhsan Doğramacı Award for High Accomplishment - Graduation with the highest GPA from Hacettepe University Department of Mathematics for among graduating class, **2007**.