

Erkut Erdem

CONTACT INFORMATION	Bilkent 3 Ufuk Sitesi D1 Blok No:5 Cankaya, Ankara, TURKEY TR-06800	<i>Tel:</i> (+90) 312 266 4577 <i>Fax:</i> (+90) 312 210 5544 <i>E-mail:</i> erkut@ceng.metu.edu.tr <i>Web:</i> www.ceng.metu.edu.tr/~erkut
DATE OF BIRTH	21 March 1980	
RESEARCH INTERESTS	Computer Vision <i>nonlinear diffusion equations, level sets, calculus of variation, shape skeletons</i>	
EDUCATION	Ph.D., Dept. of Computer Engineering, METU, Turkey, November 2008 <ul style="list-style-type: none">• Thesis Title: Simultaneous Bottom-up/Top-down Processing in Early and Mid Level Vision• Advisor: Sibel Tari• CGPA: 3.94 / 4.00 (High Honor)• Course Work: In addition to standard CS curriculum taken courses such as Variational PDE Methods in Image Processing, Computational Vision, Numerical Solutions of PDEs, Optimization, Philosophical Issues in Computation and Design. M.Sc., Dept. of Computer Engineering, METU, Turkey, July 2003 <ul style="list-style-type: none">• Thesis Title: Image-based Extraction of Material Reflectance Properties of a 3D Rigid Object• Advisor: Volkan Atalay• CGPA: 3.86 / 4.00 (High Honor) B.Sc., Dept. of Computer Engineering, METU, Turkey, June 2001 <ul style="list-style-type: none">• CGPA: 3.68 / 4.00 (High Honor)	
AWARDS	IEEE SIU 2004 Alper Atalay Best Student Paper Award (Third Prize), 2004 Interpro Information and Communication Technologies Awards, Encouragement Award, 2002	
REFEREEING	Reviewer, Pattern Recognition Additional Reviewer, ECCV 2006 Additional Reviewer, ICCV 2005	
VISITING POSITIONS	Invited Researcher Department of Mathematics (worked with Luminita A. Vese) University of California, Los Angeles (UCLA), Los Angeles, USA	Oct 2007 - Dec 2007
	Invited Researcher Virginia Bioinformatics Institute (worked with Volkan Atalay and Rengul Cetin-Atalay) Virginia Polytechnic Institute and State University, Virginia, USA	Jul 2004 - Aug 2004
ACADEMIC EXPERIENCE	Postdoctoral Researcher Département de Traitement de Signal et des Images, TELECOM ParisTech, Paris, France	April 2009 -

Teaching Assistant

Dec 2001 - Sep 2008

Department of Computer Engineering,

Middle East Technical University, Ankara, TURKEY

Courses include Image Processing, Dynamic Systems, Scientific Computing, Algorithms and Data Structures.

INTERNATIONAL JOURNAL PUBLICATIONS

E. Erdem and S. Tari, Mumford-Shah Regularizer with Contextual Feedback, *Journal of Mathematical Imaging and Vision*, Vol. 33, No. 1, pp. 67-84, January 2009

C. Aslan, A. Erdem, E. Erdem, S. Tari, Disconnected Skeleton: Shape at its Absolute Scale, *IEEE Trans. on Pattern Analysis and Machine Intelligence*, Vol. 30, No. 12, pp. 2188-2203, December 2008

A. Erdem, E. Erdem, V. Atalay, A. E. Çetin, Vision-based continuous Graffiti-like text entry system, *Optical Engineering*, Vol. 43, Issue 3, pp. 553-558, March 2004

INTERNATIONAL CONFERENCE PUBLICATIONS

Book Chapters

E. Erdem, A. Sancar Yilmaz, S. Tari, Mumford-Shah Regularizer with Spatial Coherence, *Proc. of International Conference on Scale Space Methods and Variational Methods in Computer Vision 2007 (SSVM'07)*, Ischia, Italy, Springer LNCS, Vol. 4485, pp. 545-555, May-June 2007

A. Erdem, E. Erdem, S. Tari, Articulation Prior in an Axial Representation, *Workshop on the Representation and Use of Prior Knowledge in Computer Vision - in conjunction with ECCV 2006*, Graz, Austria, to appear in Springer LNCS, May 2006

E. Erdem, A. Erdem, S. Tari, Edge Strength Functions as Shape Priors in Image Segmentation, *Proc. of Energy Minimization Methods in Computer Vision and Pattern Recognition 2005 (EMM-CVPR'05)*, Florida, USA, Springer LNCS, Vol. 3757, pp. 490-502, November 2005

Other Conference Publications

E. Erdem, A. Erdem, V. Atalay, A. E. Çetin, Computer Vision Based Unistroke Keyboard System and Mouse for the Handicapped, *Proc. of IEEE International Conference on Multimedia and Expo 2003 (ICME 2003)*, Baltimore, USA, Volume 2, pp. 765-768, July 2003

A. Erdem, E. Erdem, V. Atalay, A. E. Çetin, Computer Vision Based Unistroke Keyboards, *Proc. of 7th International Symposium On Computer and Information Sciences (ISCIS 2002)*, Florida, USA, pp. 210-214, October 2002

NATIONAL CONFERENCE PUBLICATIONS

M. Erkut Erdem, İ. Aykut Erdem, Ulaş Yılmaz, Volkan Atalay, Üç Boyutlu Katı Nesnelerin Yansıtma Özelliklerinin Görüntülerden Çıkarılması, *IEEE 12. Sinyal İşleme ve İletişim Uygulamaları Kurultayı (SIU 2004)*, Kuşadası, Nisan 2004

İ. Aykut Erdem, M. Erkut Erdem, Volkan Atalay, A. Enis Çetin, Engelliler İçin Bilgisayarlı Görmeye Dayalı Klavye ve Fare Sistemi, *IEEE 11. Sinyal İşleme ve İletişim Uygulamaları Kurultayı (SIU 2003)*, İstanbul, Haziran 2003

İ. Aykut Erdem, M. Erkut Erdem, Volkan Atalay, A. Enis Çetin, Kağıt Klavye: Bilgisayarlı Görmeye Dayalı Klavye, *IEEE 10. Sinyal İşleme ve İletişim Uygulamaları Kurultayı (SIU 2002)*, Pamukkale, Haziran 2002

İ. Aykut Erdem, M. Erkut Erdem, Volkan Atalay, A. Enis Çetin, Bilgisayarlı Görmeye Dayalı Fare Sistemi, *IEEE 10. Sinyal İşleme ve İletişim Uygulamaları Kurultayı (SIU 2002)*, Pamukkale, Haziran 2002

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CONFERENCES
(ABSTRACT ONLY)

E. Erdem and S. Tari, Mumford-Shah Regularizer with Contextual Feedback, *SIAM Conference on Imaging Science 2008*, San Diego, USA, July 2008

M. Iskar, E. Erdem, A. Erdem, S. Akman, A. Dickerman, V. Atalay, R. Cetin-Atalay, CAPRIS: A Database for Cancer Gene Promoter Related Motif Search, *FEBS journal*, Vol. 273, pp. 248, June 2006

E. Erdem, A. Erdem, V. Atalay, Image-based Extraction of Material Reflectance Properties of a 3D Rigid Object, *Eurographics 2003*, Poster Session, Granada, Spain, September 2003

A. Erdem, E. Erdem, V. Atalay, A. E. Çetin, Computer based text entry for Wearable Computing, *6th IEEE International Symposium on Wearable Computers, Demonstrations*, Seattle, USA, October 2002

A. Erdem, E. Erdem, V. Atalay, A. E. Çetin, Computer Vision Based Mouse, *ICASSP 2002, Student Forum Session*, Florida, USA, May 2002

PERSONAL
INTERESTS

An active member of Seruven (a group of people who think, write and discuss about comics and graphic novels). For more information, you can visit <http://www.seruven.org>.

REFERENCES

Assoc. Prof. Dr. Sibel Tari,
Middle East Technical University, Department of Computer Engineering
Phone: (+90 312) 210 5554, e-mail: stari@metu.edu.tr

Prof. Dr. Luminita Vese,
University of California, Los Angeles, Department of Mathematics
Phone: (+1 310) 825 4201, e-mail: lvese@math.ucla.edu

Prof. Dr. Volkan Atalay,
Middle East Technical University, Department of Computer Engineering
Phone: (+90 312) 210 5576, e-mail: volkan@ceng.metu.edu.tr

Prof. Dr. Ayse Kiper,
Middle East Technical University, Department of Computer Engineering
Phone: (+90 312) 210 5594, e-mail: ayse@ceng.metu.edu.tr