

Codruta O. Ancuti- List of Publications

Selected Publications

Codruta O. Ancuti, Cosmin Ancuti, Christophe De Vleeschouwer and Alan C. Bovik "Single-Scale Fusion: An Effective Approach to Merging Images". **IEEE Transactions on Image Processing**, October, 2016. **impact factor 3.735**.

Codruta O. Ancuti, Cosmin Ancuti . " Single *image dehazing* by multi-scale *fusion* ". **IEEE Transactions on Image Processing**, 22(8):3271-82, Aug, 2013, **impact factor 3.735**.

Cosmin Ancuti, **Codruta O. Ancuti** "*Effective Contrast-Based Dehazing for Robust Image Matching*. IEEE Geoscience and Remote Sensing Letters, accepted for publication, vol 11(12), March, 2014. **impact factor 2.228**.

Cosmin Ancuti, **Codruta O. Ancuti**, Christophe De Vleeschouwer and Alan C. Bovik , "*Night-time dehazing by fusion* ". In Proceedings of IEEE International Conference on Image Processing (IEEE ICIP), ISBN: 978-1-4673-9961-6, ISSN: 2381-8549, Phoenix, USA, Sept., 2016.

Cosmin Ancuti, **Codruta O. Ancuti** and Christophe De Vleeschouwer, "*D-HAZY: A dataset to evaluate quantitatively dehazing algorithms*". In Proceedings of IEEE International Conference on Image Processing (IEEE ICIP), ISBN: 978-1-4673-9961-6, ISSN: 2381-8549, Phoenix, USA, Sept., 2016.

Cosmin Ancuti, **Codruta O. Ancuti** and Philippe Bekaert. "Single Image Restoration of Outdoor Scenes". **In Lecture Notes in Computer Science**, Springer, 2011.

Codruta O. Ancuti, Cosmin Ancuti, Chris Hermans and Philippe Bekaert. "A Fast Semi-Inverse Approach to Detect and Remove the Haze from a Single Image". **In Lecture Notes in Computer Science**, Springer, 2011.

Codruta O. Ancuti, Cosmin Ancuti, Chris Hermans and Philippe Bekaert. "Image and Video Decolorization by Fusion". **In Lecture Notes in Computer Science**, Springer, 2011.

Cosmin Ancuti, **Codruta O. Ancuti**, and Philippe Bekaert, "Enhancing Underwater Images and Videos by Fusion", In Proc. IEEE Computer Vision and Pattern Recognition (IEEE CVPR), 2012

Codruta O. Ancuti, Cosmin Ancuti and Philippe Bekaert, "Enhancing by Saliency-guided Decolorization", In Proc. IEEE Computer Vision and Pattern Recognition (IEEE CVPR), Colorado Springs, USA, June, 2011, (**22% rate of acceptance**).

PhD Thesis

Codruta O. Ancuti: "Perceptual Declorization and Dehazing of Images and Videos", Hasselt University, Belgium, 2011, supervisor prof. Philippe Bekaert

Publications in Journals

[01] Cosmin Ancuti, **Codruta O. Ancuti** "*Effective Contrast-Based Dehazing for Robust Image Matching*. IEEE Geoscience and Remote Sensing Letters, accepted for publication, vol 11(12), March, 2014. **impact factor 2.228.**

[02] **Codruta O. Ancuti**, Cosmin Ancuti . " *Single image dehazing by multi-scale fusion* ". **IEEE Transactions on Image Processing**, 22(8):3271-82, Aug, 2013, **impact factor 3.735.**

[03] **Codruta O. Ancuti**, Cosmin Ancuti, Christophe De Vleeschouwer and Alan C. Bovik "Single-Scale Fusion: An Effective Approach to Merging Images". **IEEE Transactions on Image Processing**, October, 2016. **impact factor 3.735.**

[04] Cosmin Ancuti, **Codruta O. Ancuti** and Philippe Bekaert, "Deblurring by Matching". In **Computer Graphics Forum** ,Vol. 28, Nr. 2, pp. 619 – 628, Blackwell publishing, 2009. **impact factor 1.542.**

[05] Cosmin Ancuti, **Codruta O. Ancuti** and Philippe Bekaert, "An Efficient Two Steps Algorithm for Wide Baseline Image Matching". **Journal of Visual Computer**, 25 : 5-7, pp. 677 - 686, Wiley & sons, ISSN 0178-2789, Dec. 2009. **impact factor 1.06.**

Books and book chapters

[06] Cosmin Ancuti, **Codruta O. Ancuti** and P. Bekaert. "Single Image Restoration of Outdoor Scenes". **Book chapter in Lecture Notes in Computer Science, Volume 6855, pp 245-252.** Springer, 2011, **ISBN 978-3-642-23677-8,** Springer-Verlag Berlin Heidelberg 2010

[07] **Codruta O. Ancuti**, Cosmin Ancuti, Chris Hermans and Philippe Bekaert. "A Fast Semi-Inverse Approach to Detect and Remove the Haze from a Single Image". **Book chapter in Computer Vision – ACCV 2010, (LNCS), Volume 6493, pp 501-514,** Springer, 2011, **ISBN 978-3-642-19308-8,** Springer-Verlag Berlin Heidelberg 2011

[08] **Codruta O. Ancuti**, Cosmin Ancuti, Chris Hermans and Philippe Bekaert. "Image and Video Decolorization by Fusion". **Book chapter in Computer Vision – ACCV 2010, (LNCS), Volume 6492, pp 79-92,** Springer, 2011, **ISBN 978-3-642-19314-9,** Springer-Verlag Berlin Heidelberg 2011.

[09] Cosmin Ancuti, **Codruta O. Ancuti**, "Processing Images by Local Information", **ISBN, 978-973-108-431-2,** ArTPress, 2011.

Conference Proceedings

ISI Conferences

[10] Cosmin Ancuti, **Codruta O. Ancuti**, Christophe De Vleeschouwer and Alan C. Bovik , "*Night-time dehazing by fusion*". In Proceedings of IEEE International Conference on Image Processing (IEEE ICIP), ISBN: 978-1-4673-9961-6, ISSN: 2381-8549, Phoenix, USA, Sept., 2016.

[11] Cosmin Ancuti, **Codruta O. Ancuti** and Christophe De Vleeschouwer, " *D-HAZY: A dataset to evaluate quantitatively dehazing algorithms*". In Proceedings of IEEE International Conference on Image Processing (IEEE ICIP), ISBN: 978-1-4673-9961-6, ISSN: 2381-8549, Phoenix, USA, Sept., 2016.

[12] Cosmin Ancuti and **Codruta O. Ancuti**, "*Laplacian-guided image decolorization*". In Proceedings of IEEE International Conference on Image Processing (IEEE ICIP), ISBN: 978-1-4673-9961-6, ISSN: 2381-8549, Phoenix, USA, Sept., 2016.

[13] Cosmin Ancuti, **Codruta O. Ancuti**, Christophe De Vleeschouwer and Alan C. Bovik , "*Multi-scale Underwater Descattering*". In Proceedings of International Conference on Pattern Recognition (ICPR 2016), Cancun, Mexico, Dec., 2016.

[14] **Codruta O. Ancuti**, " Variational Segmentation under Variable Illumination Conditions". IEEE International Symposium ELMAR (IEEE ELMAR 2016), Zadar, Croatia, Sept., 2016.

[15] Cosmin Ancuti, **Codruta O. Ancuti**, and Philippe Bekaert, "Enhancing Underwater Images and Videos by Fusion", In Proc. IEEE Computer Vision and Pattern Recognition (IEEE CVPR), Providence, USA, 16-21 June 2012, ISBN 978-1-4673-1228-8.

[16] Cosmin Ancuti , **Codruta O. Ancuti** and Philippe Bekaert. "Fusion-based Restoration of the Underwater Images". IEEE International Conference on Image Processing (IEEE ICIP), Brussels, Belgium, Sept, 2011, ISBN: 978-1-4577-1303-3

[17] Mark Gerrits, Bert de Decker, Cosmin Ancuti, **Codruta O. Ancuti**, Tom Haber, and Philippe Bekaert, "Stroke-based Creation of Depth Maps". IEEE International Conference on Multimedia & Expo, (IEEE ICME), Barcelona, Spain, July, 2011, ISBN: 978-1-61284-350-6 (**top 15% accepted papers**).

[18] **Codruta O. Ancuti**, Cosmin Ancuti and Philippe Bekaert, "Enhancing by Saliency-guided Decolorization", In Proc. IEEE Computer Vision and Pattern Recognition (IEEE CVPR), Colorado Springs, USA, June, 2011, (**22% rate of acceptance**), ISBN: 978-1-4577-0395-9

[19] **Codruta O. Ancuti**, Cosmin Ancuti and Philippe Bekaert. "Decolorizing Images for Robust Matching". In Proceedings of 17th IEEE International Conference on Image Processing (IEEE ICIP), pg. 149- 153 , ISBN: 978-1-4244-7993-1 ISSN: 1522-4880, Hong Kong ,September, 2010. (**oral -20% rate of acceptance**).

[20] **Codruta O. Ancuti**, Cosmin Ancuti and Philippe Bekaert. " Effective Single Image Dehazing by Fusion". In Proceedings of 17th IEEE International Conference on Image Processing (IEEE ICIP), pg. 3541- 3545 , ISBN: 978-1-4244-7993-1 ISSN: 1522-4880, Hong Kong ,Sep., 2010.

[21] Cosmin Ancuti, **Codruta O. Ancuti** and Philippe Bekaert. "Video Super-Resolution Using High Quality Photographs". In Proceedings of 35th IEEE International Conference on Acoustics, Speech, and Signal Processing (IEEE ICASSP), pg. 862 - 865 , ISBN: 978-1-4244-4295-9, ISSN 1520-6149, Dallas, USA, 2010. **(oral - 20% rate of acceptance)**.

[22] **Codruta O. Ancuti**, Cosmin Ancuti and Philippe Bekaert. "CC-SIFT: Exploiting Chromatic Contrast for Wide-Baseline Matching". In Proceedings of 35th IEEE International Conference on Acoustics, Speech, and Signal Processing (IEEE ICASSP), pg. 938 - 941 , ISBN: 978-1-4244-4295-9, ISSN 1520-6149, Dallas, USA, 2010.

[23] Cosmin Ancuti , **Codruta O.Ancuti** and Philippe Bekaert. A Patch-Based Approach to Restore Videos Using Additional Stills ". In Proceedings of IEEE ELMAR , ISBN: 978-1-4244-6371-8, pg 143-146, Zadar, Croatia, 2010.

[24] **Codruta O. Ancuti**, Cosmin Ancuti and Philippe Bekaert. " Guiding visual attention in grayscale images for auditory substitution systems ". In Proceedings of IEEE ELMAR , ISBN: 978-1-4244-6371-8, pg 139-142, Zadar, Croatia, 2010

[25] **Codruta O. Ancuti**, Cosmin Ancuti and Philippe Bekaert, "ColEnViSon: Color Enhanced Visual Sonifier. A Polyphonic Audio Texture and Salient Scene Analysis.". In Proceedings of International Conference on Computer Vision Theory and Applications (VISAPP), Lisbon, Portugal, February 5-8, 2009.

[26] **Codruta O. Ancuti**, Cosmin Ancuti and Philippe Bekaert, "Active Systems Decisions Enhancement Using User Model in Pervasive Computing Enviroments" In Proceedings of IEEE International Conference on Pervasive Services, July 15-20 , 2007. ISBN: 1-4244-1325-7

[27] **Codruta O. Ancuti**, Michele Fumarola, Steven Palmaers, Kris Luyten, Karin Coninx, General Adaptable Services Manager for Pervasive Computing Environments, Proc. of IEEE ITI 2007.ISBN: 953-7138-09-7

BDI Conferences

[28] **Coduta O. Ancuti**, Cosmin Ancuti and Philippe Bekaert, "Enhancing Underwater Images by Fusion". In Conference Abstracts and Applications ACM SIGGRAPH , Vancouver, Canada, August, 2011.

[29] **Coduta O. Ancuti**, Cosmin Ancuti and Philippe Bekaert, " Layer-based Single Image Dehazing by Per-Pixel Haze Detection ". In Conference Abstracts and Applications ACM SIGGRAPH ASIA, Seoul, Korea, December, 2010.

[30] **Coduta O. Ancuti**, Cosmin Ancuti and Philippe Bekaert "Fusion-based Image And Video Decolorization", In Conference Abstracts and Applications ACM SIGGRAPH ASIA, Seoul, Korea, December, 2010.

[31] Cosmin Ancuti, **Codruta O. Ancuti** and Philippe Bekaert, "A Framework to Improve Matching Results of Widely Separated Views". In Proceedings of International Conference on Computer Vision Theory and Applications (VISAPP), Vol. 1, pg. 474-480, ISBN: 978-989-674-028-3 , Angers, France, May 17-21, 2010.

[32] **Codruta O. Ancuti**, Cosmin Ancuti and Philippe Bekaert, " Robust Grayscale Conversion for Vision-Substitution Systems". In Proceedings of International Conference on Computer Vision Theory and Applications (VISAPP), Vol. 1, pg. 130-136, ISBN: 978-989-674-028-3 , Angers, France, May 17-21, 2010.

[33] **Codruta O. Ancuti**, Cosmin Ancuti and Philippe Bekaert, "Preserving visual saliency in image to sound substitution systems". In Proceedings of SPIE Human Vision and Electronic Imaging (HVEI 2009), San Jose, USA, January 19-21 , 2009.

[34] **Coduta O. Ancuti**, Cosmin Ancuti and Philippe Bekaert "An Effective Grayscale Conversion with Applications to Image Enhancement", In Conference Abstracts and Applications ACM SIGGRAPH ASIA, Yokohama, Japan, December, 2009.

[35] Cosmin Ancuti, **Coduta O. Ancuti** and Philippe Bekaert, "Image Deblurring by Corresponding Regions". In Conference Abstracts and Applications ACM SIGGRAPH, Los Angeles, USA, August 11-15, 2008.

[36] Cosmin Ancuti, **Codruta O. Ancuti** and Philippe Bekaert, "Robust matching of images across large viewpoint changes". In Proceedings of Visualization, Imaging and Image Processing (VIIP 2008), Palma de Mallorca, Spain, September 1-3 , 2008.