

Cosmin Ancuti- List of Publications

Selected Publications

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 1.823.**

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 3.199.**

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

Mark Gerrits, Bert de Decker, **Cosmin Ancuti**, Codruta Ancuti, Tom Haber, and Philippe Bekaert, "Stroke-based Creation of Depth Maps". IEEE International Conference on Multimedia & Expo, (IEEE ICME), Barcelona, Spain, July, 2011 (**top 15% accepted papers**).

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

Cosmin Ancuti: "Low Level Vision Features for Enhancing Images and Videos", Hasselt University, Belgium, July 2009, 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 1.823.**
- [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 3.199.**
- [03] **Cosmin Ancuti**, Codruta Orniana Ancuti and Philippe Bekaert, "Deblurring by Matching". In **Computer Graphics Forum** ,Vol. 28, Nr. 2, pp. 619 – 628, Blackwell publishing, 2009. **impact factor 1.638.**
- [04] **Cosmin Ancuti**, Codruta Orniana 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 0.909.**
- [05] **Cosmin Ancuti**, Tom Haber, Tom Mertens and Philippe Bekaert, "Video enhancement using reference photographs". **Journal of Visual Computer**, 24 : 7-9, pp. 709 - 717, Wiley & sons, ISSN 0178-2789, Jan. 2009. **impact factor 0.909.**
- [06] **Cosmin Ancuti** and Philippe Bekaert, "A scale invariant detector based on local energy model for matching images". In Proc. of the 15th International Conferences on Computer Graphics, Visualization and Computer Vision (**Journal of WSCG**), Czech Republic, Jan. 29 – Feb. 1, 2007.
- [07] **Cosmin Ancuti** and Philippe Bekaert, "Increasing the number of matches for local scale invariant feature points". In Journal of Computer Graphics & Geometry , Vol. 9, Nr. 3, 2007.

Books and book chapters

- [08] **Cosmin Ancuti**, Codruta O. Ancuti and Philippe Bekaert. "Single Image Restoration of Outdoor Scenes". In **Lecture Notes in Computer Science**, Springer, 2011.
- [09] 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.
- [10] Codruta O. Ancuti, **Cosmin Ancuti**, Chris Hermans and Philippe Bekaert. "Image and Video Decolorization by Fusion". In **Lecture Notes in Computer Science**, Springer, 2011.
- [11] **Cosmin Ancuti**, Codruta O. Ancuti, "Processing Images by Local Information", ISBN, 978-973-108-431-2, ArTPress, 2011.

Conference Proceedings

- [12] **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
- [13] **Cosmin Ancuti** , Codruta O. Ancuti, and Philippe Bekaert. "Fusion-based Restoration of the Underwater Images". IEEE International Conference on Image Processing (IEEE ICIP), Belgium, 2011
- [14] Mark Gerrits, Bert de Decker, **Cosmin Ancuti**, Codruta Ancuti, Tom Haber, and Philippe Bekaert, "Stroke-based Creation of Depth Maps". IEEE International Conference on Multimedia & Expo, (IEEE ICME), Barcelona, Spain, July, 2011 (**top 15% accepted papers**).
- [15] 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**).
- [16] Coduta O. Ancuti, **Cosmin Ancuti** and Philippe Bekaert, "Enhancing Underwater Images by Fusion". In Conference Abstracts and Applications ACM SIGGRAPH , Vancouver, Canada, August, 2011.
- [17] 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**).
- [18] 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.
- [19] **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**).
- [20] 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.
- [21] 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.
- [22] 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.
- [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] **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.
- [26] 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.
- [27] **Cosmin Ancuti**, Codruta Orniana Ancuti and Philippe Bekaert, "Deblurring by Matching". EUROGRAPHICS, Munchen, Germany, 2009. **(oral -19% rate of acceptance)**.
- [28] **Cosmin Ancuti**, Codruta Orniana Ancuti and Philippe Bekaert, "An Efficient Two Steps Algorithm for Wide Baseline Image Matching". Proceedings of Computer Graphics International, Victoria, Canada, 2009. **(oral -21% rate of acceptance)**.
- [29] Codruta O. Ancuti, **Cosmin Ancuti** and Philippe Bekaert, "CoEnViSon: 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.
- [30] 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.
- [31] 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.
- [32] **Cosmin Ancuti**, Tom Haber, Tom Mertens and Philippe Bekaert, "Video enhancement using reference photographs". Proceedings of Computer Graphics International, Istanbul, Turkey, 2008. **(oral -17% rate of acceptance)**.
- [33] **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.
- [34] **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.
- [35] **Cosmin Ancuti** and Philippe Bekaert, "SIFT-CCH: Increasing the SIFT distinctness by Color Co-occurrence Histograms" In Proceedings of 5th IEEE International Symposium on Image and Signal Processing and Analysis, Istanbul, September 27-29 , 2007.
- [36] 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.
- [37] **Cosmin Ancuti** and Philippe Bekaert, "More effective image matching with Scale Invariant Feature Transform". In Proceedings of Spring Conference on Computer Graphics, Budmerice, Slovakia, April 26 - 28, 2007.