

Fully Refereed Publications

2009

1. C. Charron, Y.Hicks, P.Hall and D. Cosker. *Incremental learning of Dynamical Models of Faces*. BMVC 2009 (to appear).
2. C. Charon, Y.Hicks, and P. Hall. *Applying incremental learning to parallel image segmentation*. *IEEE international workshop on emergent issues in large amounts of visual data*, ICCV 2009 (to appear)
3. C. Li, P.Hall and P. Willis. *ARTcams: Attributed Rational Tensor Cameras*. *Computational Aesthetics 2009*, 73 – 81.
4. C. Li, P. Hall and P.Willis, *Environment Matting into Photographs using Coloured RTcams*. *Proceeding of Conference on Visual Media Production 2008*, 1-8. **Invited to special Issue (in production)**.

2008

5. A. Balikai, S. Sundaram and P. Hall. *Automatic multilevel form colour dropout using graph cuts*. *IADIS International Conference on Computer Graphics and Visualization*, 127 - 133.
6. Y-Z. Song, P. Hall, P. Rosin, and J. Collomosse *Arty Shapes*. *Computational Aesthetics 2008*, 65 - 72
7. A. Balikai, P. Rosin Y-Z. Song, and P. Hall, *Shapes Fit for Purpose*, *BMVC 2008*, 443-452
8. C. Li and P. Hall, *Learning a Stable Structure to Describe Dynamic Texture*, *BMVC 2008*, 23-32
9. Y-Z Song and P. Hall, *Stable Image Descriptions using Gestalt Principles*, *Proceedings of the 4th International Symposium on Advances in Visual Computing, 2008*. LNCS 5358, 318 – 327.
10. X Bai, Y-Z. Song, A. Balikai and P.M. Hall, *Structure is a visual class invariant*. *Proceedings of the 2008 Joint IAPR International Workshop on Structural, Syntactic, and Statistical Pattern Recognition*. LNCS vol 5342, 329 – 338.

2007

11. Hall, Collomosse, Song, Shen, Li, *RTcams: A new perspective on non-photorealistic rendering*. *IEEE TVCG 13(5)* 966-979, 2007
12. Bai, Song and Hall, *Learning object classes from structure*, *BMVC 2007*, 322 - 330
13. Li and Hall, *Colour Constancy Bases on Model Selection*, *BMVC 2007*, 122-131

2006

14. Li and Hall. *Attributed Rational Tensor Camera*. *Conference on Visual Media Production 2006*, 187
15. Collomosse and Hall, *Video motion analysis for the synthesis of dynamic cues and Futurist art*. *Graphical Models 68(5)*, 402-114, 2006.
16. Collomosse and Hall, *Saliency-adaptive Painterly Rendering using Genetic Search*. *Intl. Journal on Artificial Intelligence Tools*, 15(4). 551-576, 2006

2005

17. Collomosse and Hall, *Video Paintbox: The Fine Art of Video Painting*. *Computers & Graphics*, 2005 29(6), 826-870. Elsevier

18. Collomosse and Hall, *Rendering cartoon style motion cues in post-production video*. Graphical Models (formerly CGIP), 67(6), pp.549-564. Elsevier. (November 2005)
19. Collomosse and Hall, *Stroke surfaces: Temporally Coherent Artistic Animation from Video*, IEEE Transactions on Visualization and Computer Graphics, 2005, 11(5), 540-549
20. Collomosse and Hall, *Genetic Paint: A Search for Salient Paintings* Lecture Notes in Computer Science (Proc. EvoMUSART), vol. 3449, pp. 437-447. Springer-Verlag. (March 2005). **Runner-up: Best Paper 2005.**
21. Collomosse and Hall. *Motion analysis in video: dolls, dynamic cues and Modern Art*. Proc. Video, Vision and Graphics (VVG). pp 109-116. Eurographics Assoc. (July 2005).
22. Hall and Owen, *Simple Canonical Views*. 839-848, Proc. BMVC 2005

2004

23. Collomosse and Hall, *A Mid-level Description of Video, with Application to Non-Photorealistic Animation*, **7-16**, British Machine Vision Conference (BMVC) 2004, **Winner BMVA Industry Prize.**
24. Hall, Owen and Collomosse, *Learning to detect low-level features*, BMVC 2004
25. Hall and Owen, *A trainable low-level feature detector*, 708-711, ICPR 2004

2003

26. Collomosse and Hall, *Cubist style rendering from photographs*, **443-453**, IEEE Transactions on Visualization and Computer Graphics 9(4), 2003
27. Hicks, Hall, and Marshall, *A method to add Hidden Markov Models with application to learning articulated motion*, **489-498**, BMVC 2003
28. Collomosse and Hall, *Video Analysis for Cartoon-like Special Effect*, **749-758**, BMVC 2003, **Winner BMVA Industry Prize.**
29. Collomosse and Hall, *Cartoon-Style Rendering of Motion from Video*, **117-124**, Vision, Video, and Graphics 2003

2002

30. Hall, Marshall and Martin, *Adding and subtracting eigenspaces with eigenvalue decomposition and singular value decomposition* 20(13), 1009-1016, Image and Vision Computing 2002
31. Hicks, Hall and Marshall, *Tracking People in three dimensions using a hierarchical model of dynamics*, Image and Vision Computing 20(1), 691-700, 2002
32. Collomosse and Hall, *Painterly rendering using image salience*, 122-128, Eurographics UK 2002, **Winner Terry Hewitt Prize.**

2001

33. Hicks, Hall and Marshall, *A hierarchical model of dynamics for tracking people in a monocular video sequence*, BMVA 2001. **Winner BMVC demonstration prize.**
34. Hall, *On the addition and comparison of graphs labelled with stochastic variables: learnable anatomical catalogues*, , Journal of Combinatorial Optimization 5, 43-58, 2001

2000

35. Hall, Marshall and Martin, *Merging and splitting eigenspaces*, 1042-1049, IEEE Transactions on Pattern Analysis and Machine Intelligence 22(9), 2000
36. Hall, *Discrete mathematics in medical imaging: a personal view*. AMS (DIMACS) workshop on discrete mathematics in medical computing, 2000

37. Hall, *A model for learning human vascular anatomy*. AMS (DIMACS) workshop on discrete mathematics in medical computing, 2000

Last Century

38. Hall, *Nonphotorealistic rendering by Q-mapping*, Computer Graphics Forum 18, 27-39, 1999
39. Hall, Marshall and Martin, *Adding and subtracting eigenspaces*, BMVC 453-462, 1999
40. Karalouva, Hall and Marshall, *Articulated model estimation from video sequences*, Proc. *IEE Workshop on Computer Vision and Virtual Human Modelling 1998*.
41. Hall, Marshall and Martin, *Incrementally computing eigenspace models*, BMVC 286-295, 1998
42. Hall, *Drawing by example*, Eurographics UK 159-167, 1998
43. Hall, *A complete simulation of x-ray angiography*, Proc. SPIE Medical Imaging, Volume 3338, 1064-1075 1998
44. Hall, *Reconstructing vascular skeletons from x-ray angiograms*, Proc. SPIE Medical Imaging, Volume 3338, 480-491, 1998
45. Hall, *Modelling inter-patient variation in structure, shape, and function*, Proc. SPIE Medical Imaging, Volume 3338, 468-491, 1998
46. Hall, Ngan and Adreae, *Reconstruction of vascular networks using three-dimensional models* IEEE Transactions on Medical Imaging 16(6), 919-929, 1997
47. Hall, *Robust reconstruction of 3D space-curves from images at arbitrary angles*, BMVC 300-309, 1997
48. Mc Kevitt and Hall, *Automatic interpretation of angiograms*, 235-252, Artificial Intelligence Review 10(3-4), 235-252, 1996
49. Hall, Ngan and Andreae, *Reconstruction of blood vessel networks from x-ray projections and a vascular catalogue*, European Conference on Computer Vision 293-303, 1996.
50. Hall, *A method to simulate x-ray angiography with application to the reconstruction of vasculature*, *Mathematical Modelling and Scientific Computing 1996*
51. Hall, *Automated Analysis of X-Ray Angiograms*, New Zealand Journal of Computing 6, 253-260, 1995
52. Hall and Devitt, *Integrated Planning for Computer Animation*, Artificial neural networks and expert systems 334-337, 1995
53. Hall, *Reconstruction of blood vessels networks from a few perspective projections*, Artificial neural networks and expert systems 369-372, 1995
54. Hall and Mc Kevitt, *Integrating Vision Processing and Natural Language Processing with a clinical application*, Artificial neural networks and expert systems 373-376, 1995, **Winner: Best Paper Prize**
55. Hall and Mc Kevitt, *Combining language and vision processing to reconstruct vasculature*, Image and Vision Computing, 95-100, 1995,
56. Hall, *Nonphotorealistic shape cues for visualisation*, The Third International Conference in Central Europe on Computer Graphics and Visualisation, 113-122, 1995.
57. Hall, *Pattern-filling large areas*, Australian Computer Science Communications 16, 35-42, 1994
58. Hine and Hall *Novel approaches to parallel volume rendering*, IEE colloquium of parallel architectures for image processing 1994
59. Hall, *Volume Rendering for Vector Fields*, The Visual Computer 10, 69-78, 1993
60. Hall, *Visualising 3D vector fields using colour*, Eurographics UK, 19-28, 1993

61. Hall, Watt, Walton and Bergval, *Segmenting and reconstructing vascular lesions from biplane angiogram projection*, Proc. Digital Image Computing Techniques and Applications, 802-809, 1993
62. Hall, McGegor and Watt, *A graph based model of a collection of physical vasculature*, Proc. Digital Image Computing Techniques and Applications, 414-421, 1993
63. Hall and Watt, *What is this thing called Visualisation?*, Eurographics UK, 53-721992
64. Fuller, Hall, De Geuss, Maddock and Watt, *VisLab: Visualisation in Scientific Computing at Sheffield University*, Eurographics UK, 11-46 1991
65. Hall and Watt, *Rapid volume rendering using a boundary-fill guided ray cast algorithm*, Proc. Comp.Graph. 235-250, 1991