HORST BISCHOF

Curriculum Vitae

January 2, 2013

ADDRESS

Home:

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A-8063 Eggersdorf b. Graz
AUSTRIA

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Institute for Computer Graphics and Vision

Graz University of Technology
Inffeldgasse 16/II
A-8010 Graz, AUSTRIA

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PERSONAL INFORMATION

Name:	Horst Bischof
Born:	March 26, 1967, Saanen, Switzerland.
Citizenship:	Austria

CURRENT POSITION

- Since 2004 Full Professor for Computer Vision at Institute for Computer Graphics and Vision (ICG),
  Graz University of Technology, Austria.
- Since 2011 Vice Rector Research Graz University of Technology

EDUCATION

Habilitation:	Applied Computer Science, from Vienna University of Technology, 1998.
Ph.D.	Vienna University of Technology, with distinction, 1993. Thesis title: Pyramidal Neural Networks. Thesis advisor: Prof. W.G. Kropatsch
M.S.	Vienna University of Technology, Computer Science, 1990. Thesis title: Interpretation von Fernerkundungsdaten mit Hilfe von Back propagation Netzwerken am Beispiel der Baumerkennung aus Farb-Infrarot-Luftbildern. Thesis advisors: Prof. R. Trappl, Dr. A. Pinz
AHS	Bundesoberstufen Realgymnasium mit erweitertem Unterricht in Biologie und Umweltkunde sowie Physik und Chemie, Murau, 1981-1985, with distinction.
Hauptschule	Neumarkt, 1977-1981
Volksschule	St. Marein bei Neumarkt 1973-1977

EMPLOYMENT

10/11 - date

Vice Rector Research
Graz University of Technology, Austria

1/04 - date

Full Professor for Computer Vision
Institute for Computer Graphics and Vision (ICG)
Graz University of Technology, Austria

10/01 - 12/03

Guest Professor
Institute for Computer Graphics and Vision (ICG)
Graz University of Technology, Austria

07/98 - 10/01

Associate Professor
Pattern Recognition and Image Processing Group
Institute of Computer Aided Automation
Vienna University of Technology, Austria

10/91 - 10/01

University Assistant
Pattern Recognition and Image Processing Group
Institute of Computer Aided Automation
Vienna University of Technology, Austria

10/95 - 5/96

Military Service
Military Academy Wr. Neustadt

1/90-9/91

Free Collaborator
Institute for Surveillance and Remote Sensing
University of Bodenkultur, Austria.

VISITING POSITIONS

October 1992	University of Palermo, Department of Applied Mathematics (Prof. DiGesu)
June – September 1993	Ruhr-University Bochum, Inst. f. Neuroinformatics (Prof. v. Seelen)
August 1994	Ruhr-University Bochum, Inst. f. Neuroinformatics (Prof. v. Seelen)
October – November 1997	University of Ljubljana, Computer Vision Lab (Prof. Solina).

TUTORIALS

- Subspace Methods for Visual Learning and Recognition(together with A. Leonardis), ECCV 2002, Kopenhagen.
- Subspace Methods for Recognition (together with A. Leonardis), ICPR 2002, Quebec.
- Subspace methods for visual learning and recognition (together with A. Leonardis), EUSIPCO 2004, Vienna.
- Visual Learning for Recognition Generative vs. Discriminative and Local vs. Global, Cognitive Vision Summer School 2005, Bonn.
- Visual Learning and Recognition (together with A. Leonardis), 5th VIPS Advanced School on Computer Vision, Pattern Recognition and Image Processing, 2005, Verona.
- Semi-supervised Learning for Vision (together with A. Saffari and C. Leistner), CVPR 2010 San Francisco.

Diploma and PhD students

Diploma Theses:

1. Florian Pezzei: Vergleich von Klassifikationsalgorithmen an CMG-Daten, 1999, Vienna University of Technology.
2. Thomas Melzer: Adaptive Robotersteuerung mittels visueller Rckkopplung, 1999, Vienna University of Technology.
3. Thomas Nemec: Gesichtserkennungssystem zur Raumueberwachung 1999, Vienna University of Technology.
4. Michael Reiter: Fast Eigenspace Methods for Face Detection 1999, Vienna University of Technology.

5. Roland Ebensberger: Robuste Eigenbildfunktionen, 1999, Vienna University of Technology.
6. Horng-Yang Chen: Robust Spot Fitting for Genetic-Array Images 1999, Vienna University of Technology.
7. Randolph Kepplinger: Robot Navigation using Robust Eigenspaces 1999, Vienna University of Technology.
8. Marion Artlieb: View Interpolation mit Radial-Basis-Function-Networks, 2000, Vienna University of Technology.
9. Alexander Selb: Modellselektion von Clusteringverfahren mittels minimaler Beschreibungslnge, 2000, Vienna University of Technology.
10. Roman Pflugfelder: Visual Traffic Surveillance using Real-time Tracking, 2002, Vienna University of Technology.
11. Christian Wolf: Content based Image Retrieval using Interest Points and Texture Features, 2002, Vienna University of Technology.
12. Till Federspiel: Lagebestimmung des Kopfes mittels Kernel Canonical Correlation Analysis, 2002,Vienna University of Technology.
13. Felix Lee: Zutrittskontrolle mittels Videoberwachung, 2002, Graz University of Technology.
14. Michael Fussenegger: Gesichts- und Augendetektion in Echtzeit, 2003, Graz University of Technology.
15. Robert Berger: Lernen von Personenbewegungen, 2003, Graz University of Technology.
16. Tsvetan Bikov: Multi-View Tracking Mthods, 2003, Vienna University of Technology.
17. Michael Donoser: Objekt Segmentierung in Film und Video 2003, Graz University of Technology.
18. Georg Langs: Automatic Quantification of Destructive Changes caused by Rheumatoid Arthritis, 2003, Vienna University of Technology.
19. Martin Oswald: Echtzeit-Verfolgung von Gesichtern in Videodaten, 2003, Graz University of Technology.
20. Martin Wollendorfer: Punktfokusmethoden zur 2 1/2 D Rekonstruktion in der Auflichtmikroskopie, 2003, Graz University of Technology.
21. Christian Neuner: Entwicklung von Methoden zur 'change detection' in multitemporalen Radarsatbildern, 2003, Graz University of Technology.
22. Martin Prangl: Erkennung von Metallen in Röngtenbildern für medizinische Anwendungen, 2004, Graz University of Technology.
23. Josef Weiss: Semantische Interpretation von Videosequenzen, 2005, Graz University of Technology.
24. Wolfgang Schneider: Gesichtsdatenkompression, 2005, Graz University of Technology.

25. Hannes Fassold: Verfeinerung von DEM mit Shape from Shading und automatischer Bestimmung von Lichtquelle und Reflexionsparameter, 2004, Graz University of Technology.

26. Sandra Ober: Erkennen von stckweise planaren Objekten mit Geometric Hashing, 2004, Graz University of Technology.

27. Clemens Arth: Fahrzeugklassifikation unter Verwendung des ADA-Boost Algorithmus, 2004, Graz University of Technology.

28. Helmut Grabner: Autodetektion mit AdaBoost, 2004, Graz University of Technology.

29. Thomas Pock: Robust Segmentation of Tubular Structures in 3D Volume Data, 2004, Graz University of Technology.

30. Michael Grabner: Object Recognition with local feature trajectories, 2004, Graz University of Technology.

31. Josef Frühwirth: Automatic Exposure Control of a Fullfeatured CMOS Camera, 2004, Graz University of Technology.

32. Christian Janko: Analysis of Portak Vein Corrosion Casts, 2005, Graz University of Technology.

33. Lukas Zebedin: Texturing Complex 3D Models 2005, Graz University of Technology.

34. Werner Trobin: Pedestrian Detection for Mobile Robots, 2005, Graz University of Technology.

35. Harald Schmiedegg: Texturing 3D models from historical images, 2005, Graz University of Technology.

36. Peter Brunner: Improvement of Signal Detection Methods for Brain-Computer Interfacing 2005, Graz University of Technology.

37. Markus Wimmer: Combining Classification Results of Highly Redundant Digital Aerial Images, 2005, Graz University of Technology.

38. Ram Surinder: Object Recognition from Local Features, 2006, Graz University of Technology.

39. Christian Leistner Robust Real-Time Vehicle Detection on an Embedded DSP Platform 2006, Graz University of Technology.

40. Manfred Klopschitz Comparison of Self-Calibration Techniques 2006, Graz University of Technology.

41. Clemens Orthacker, Human Motion Flow Analysis Spatio-Temporal Optical Flow Techniques for Persisten Human Motion Patterns 2006, Graz University of Technology.

42. Thomas Mauthner, Robot Localization using Omnidirectional Images, 2006, Graz University of Technology.

43. Christian Bauer, Interactive Virtual Reality Based Segmentation of Volumetric Medical Image Data, 2006, Graz University of Technology.

44. Arnold Ischara, Single Camera Visual Odometry for Mobile Robots, 2006, Graz University of Technology.

45. Wolfgang Heidl, A Computer Vision System for Simultaneous Calibration of a Stereo Camera Rig and Kinematic Calibration of an Articulated Robot Arm, 2006, Graz University of Technology.

46. Stefan Kluckner, Nicht-lineare 3D-Volumen Registrierung mit einem lokal affinen Modell, 2006, Graz University of Technology.

47. Marcus Thaler, Dreidimensionale Gesichtsanimationen als Feedback fr Brain-Computer Interfaces, 2006, Graz University of Technology.

48. Florian Limberger, Robust Real-Time License Plate Recognition on an Embedded DSP Platform, 2006, Graz University of Technology.

49. Thomas Weber: Ermittlung der Durchschnittsgeschwindigkeit von Fahrzeugen 2007, Graz University of Technology.

50. Georg Pacher: Real-Time Model-Based Object Tracking using Multiple Views 2007, Graz University of Technology.

51. Thomas Kenner: Fehlererkennung mittels One-class Boosting, 2007, Graz University of Technology.

52. Elisabeth Lex: Robuste Gesichtserkennung, 2007, Graz University of Technology.

53. Andreas Kriechbaum:Segmentation of Moving Objects in Film and Video, 2007, Graz University of Technology.

54. Thomas Weber: Evaluation of the mean link travel time using digital image processing, 2007, Graz University of Technology.

55. Christian Mirth: Low-Level Features from Video for Traffic Jam Detection, 2007, Graz University of Technology.

56. Theresa Rienmüller: Self-localization for soccer robots of the middle size league, 2008, Graz University of Technology.

57. Hayko Riemenschneider: On-line Object Recognition using MSER Tracking, 2008, Graz University of Technology.

58. Markus Unger: An Interactive Framework for Globally Optimal Image Segmentation with Local Constraints 2008, Graz University of Technology.

59. Petra Korica-Pehserl: Analyse und Synthese der Gesichtsausdrücke mit dem selbst entwickelten Robotergesicht FLEA 2008, Graz University of Technology.

60. Manuel Werlberger: Globally Optimal TV-L1 Shape Prior Segmentation,2008, Graz University of Technology.

61. Michael Rabatscher: Model Based Generation of ISO Conform Images, Qality Assessment and Face Recognition 2008, Graz University of Technology.

62. Markus Heber: 3D Reconstruction and Geographical Referencing of Lightning Discharges 2008, Graz University of Technology.

63. Peter Kontschieder: Entropy based Registration of Transmission Electron Microscopy Image Stacks 2008, Graz University of Technology.

64. Katrin Pirker: Measuring Human Body Volume for Segmental Impedance Measurement in a Clinical Environmen 2008, Graz University of Technology.

65. Sasa Grbic: Registration of Dental CT Images for Jawbone Implant Resorption Analysis, 2008, Graz University of Technology.

66. Stephan Neumann: Robot Self-Localization Using Principal Component Analysis, 2008, Graz University of Technology.

67. Sabine Sternig: Robust Object Detection Using an On-line Learned Classifier Grid, 2008, Graz University of Technology.

68. Martin Godec: Robust Object Tracking using Semi-Supervised Online Boosting, 2008, Graz University of Technology.

69. Martin Lenz: Solution of an Industrial Measurement Task with a Robot Assisted Structured Light Sensor, 2008, Graz University of Technology.

70. Paul Urthaler: Glasses detection and segmentation from face portrait images, 2008, Graz University of Technology.

71. Martin Hirzer: Segmentation of Face Images, 2008, Graz University of Technology.

72. Paul Wohlhart: Tracking on-line learned Natural Features for Mobile Augmented Reality 2009, Graz University of Technology.

73. Martin Köstinger:An object recognition system for planar trademark and logo retrieval. 2009, Graz University of Technology.

74. Christian Kurz: Constrained Multi-Camera Motion Estimation. 2009, Graz University of Technology.

75. Andreas Wendel:Facade Segmentation from Streetside Images. 2009, Graz University of Technology.

76. Katrin Amlacher: Geo-Indexed Object Recognition in Urban Environments. 2009, Graz University of Technology.

77. Christian Reinbacher: Semi Automatic Segmentation of Articular Cartilage using Variational Methods. 2009, Graz University of Technology.

78. Severin Stampler: Discrimination of Scribes in Medieval Manuscripts. 2009, Graz University of Technology.

79. Martin Hamker: Quality Estimation in Fingerprint Images. 2009, Graz University of Technology.

80. Matthias Straka: Person Independent Head Pose Estimation by Non-Linear Regression of Histograms of Oriented Gradients. 2009, Graz University of Technology.

81. Elmar Rückert: Simultaneous localisation and mapping for mobile robots with recent sensor technologies, 2009, Graz University of Technology.

82. Nebojsa Simic: Training On-line Boosting Classifiers on Asymmetric Datasets, 2009, Graz University of Technology.

83. Michael Maurer:Rigid Body Reconstruction for Motion Analysis of Giant Honeybees Using Stereo Vision. 2010, Graz University of Technology.

84. Stefan Heber: 3D Image Reconstruction Using Active Wavefront Sampling. 2010, Graz University of Technology.

85. Armin Berger:Learning Object Detectors from Multiple Cameras by Centralized Information Fusion 2009-2010, Graz University of Technology.

86. Gernot Margreithner: Robust Aerial Image Matching in Temporal Variant Regions 2009-2010, Graz University of Technology.

87. Sylwia Steginska: Texture analysis and pattern recognition for weather radar imaging 2011, Graz University of Technology.

88. Samuel Schulter: A Transformation Invariant Learning Approach for Detection and Tracking using Weakly-related Videos, 2010-2011. Graz University of Technology.

89. Lukas Daum: Transfer Learninig mit Random Forests. 2010-2011. Graz University of Technology.

90. David Ferstl: Dynamic Illumination for Robust Microscopic 3D Metrology. 2011. Graz University of Technology.

91. Heinz Fleischhacker: Image-based Quality Analysis for Scarlet Runners. 2009-2011. Graz University of Technology.

92. Gerald Fritz: Human Action Recognition using Multiple Instance Learning: A Comparative Study. 2008-2011. Graz University of Technology.

93. Johannes Höller: A 3D Reference Model for Presentation of 2D/3D Image Based Forensic Data. 2010-2011. Graz University of Technology.

94. Thomas Kempter: Online Model-Based Multi-Scale Pose Estimation. 2011. Graz University of Technology.

95. Georg Kummert: On-line Unsupervised Outlier Detection in Video Streams: A quantitative Study. 2009-2011. Graz University of Technology.

96. Robert Lanner: Realtime Incremental Image Stitching For Industrial Quality Inspection. 2010-2011. Graz University of Technology.

97. Markus Murschitz: Video-Based Human Body Action Recognition for Games. 2010-2011. Graz University of Technology.

98. Joachim Pehserl: Object Recognition using the Autonomous Service Robot FLEA. 2008-2011. Graz University of Technology.

99. Peter Pinggera: Recovery of Depth Information Using Paired Optical and Thermal Images. 2011. Graz University of Technology.

100. Max Stricker: Sparse Coding for Video-Based Analysis. 2011-2012. Graz University of Technology.

101. Steffanie Wechtitisch: Multi-frame film restoration - dirt and dust detection. 2011-2012. Graz University of Technology.

102. Mario Katusic: Human-Inspired Visual Servoing for Automatic Take-Off, Hovering and Landing of MAVs, 2011-2012. Graz University of Technology.

103. Christian Mischitz: Interactive Vision Based Reconstruction of Statistical 3D Microstructure of Electrodes of Lithium-Ion Cells. 2011-2012 Graz University of Technology.

104. Philipp Paier: Computer-Aided Classification of Butterflies using Shape and Appearance, 2011-2012. Graz University of Technology.

105. Stephan Berer: Video Registration and Depth Propagation for Changing 3D Environments, 2011-2012. Graz University of Technology.

106. Christof Gratl: 3D Morphable Models,2009-2012. Graz University of Technology.

107. Mario Johansson: Data Warehouse F&T. 2012. Graz University of Technology.

PhD Theses:

1. Norbert Brändle: Robust Analysis of Spot Array Images, (1999-2002), Vienna University of Technology.

2. Thomas Melzer: Generalized Canonical Correlation Analysis for Object Recognition, (1999-2002), Vienna University of Technology.

3. Martin Sengel: Pose Determination with Principal Component Analysis on More Than Two Degrees of Freedom, (1999-2002), Graz University of Technology.

4. Minu Ayromlou: Cue Integration Techniques for Robust Feature Tracking, (1998-2003), Vienna University of Technology.

5. Gustavo Fernandez Dominguez: Volumetric Nonlinear Filtering applied to Computed Tomography Imaging (2001–2004) Graz University of Technology.

6. Ahmed Nabil Belbachier: On-board Processing for an Infrared Observatory (2000-2005), Vienna University of Technology.

7. Vuk Krivec: Fingerprint classification and matching using an adaptive homogenity mask, (2001–2004) Graz University of Technology.

8. Reinhard Danzl: Integrating Shape from Stereo and Shape from Focus for Surface Reconstruction in Optical Microscopy. (2002–2004), Graz University of Technology.

9. Pierre Elbischger: Computer Vision Methods for the Automatic Analysis of Fibrous Structures in Biological Soft Tissues, (2002-2005), Graz University of Technology.

10. Friedrich Fraundorfer: Visual Localization within a World composed of Planes (2002-2006), Graz University of Technology.

11. Martin Urschler: Nonlinear intra-modality registration of medical volume data, (2004-2007) Graz University of Technology.

12. Michael Donoser: Advanced Segmentation and Tracking Algorithms and their Application to 3D Paper Structure Analysis, (2003-2007), Graz University of Technology.

13. Georg Langs: Autonomous Learning of Appearance Models in Medical Image Analysis, (2003-2007), Graz University of Technology.

14. Martin Winter: Spatial Relations of Features and Descriptors for Appearance Based Object Recognition, (2003-2007), Graz University of Technology.

15. Raimund Leitner: The IMAGE Framework for Unsupervised Learning for Object Recognition, (2002-2007), Graz University of Technology.

16. Peter Roth: On-line Conservative Learning (2003-2007), Graz University of Technology.

17. Thomas Pock: Fast Total Variation for Computer Vision (2005-2008), Graz University of Technology.

18. Roman Pflugfelder: Self-calibrating Cameras in Video Surveillance (2002-2008), Graz University of Technology.

19. Clemens Arth: Visual Surveillance on DSP-Based Embedded Platforms (2004-2008), Graz University of Technology.

20. Michael Grabner: Visual Tracking through Online Learning of Discriminative Representations (2005-2008), Graz University of Technology.

21. Helmut Grabner: Online Boosting und Vision (2004-2008), Graz University of Technology.

22. Martina Uray: Incremental, Robust, and Efficient Linear Discriminant Analysis Learning (2004-2008), Graz University of Technology.

23. Matthias Rüther: Integrating Vision and Robotics: A Highly Flexible Measurement Cell for Industrial Quality Inspection (2002-2009), Graz University of Technology.

24. Ram Surinder: Fingerprint Ridge Orientation Modeling, (2005-2009), Graz University of Technology.

25. Werner Trobin: Local, Semi-global, and Global Optimization for Motion Estimation, (2005-2009), Graz University of Technology.

26. Nguyen Thi Thuy: Object Detection from Aerial Images, (2004-2009), Graz University of Technology.

27. Christian Bauer:Segmentation of 3D tubular tree structures in medical images,(2007-2010), Graz University of Technology.

28. Christian Leistner: Semi-supervised Ensemble Methods for Computer Vision,(2007-2010), Graz University of Technology.

29. Michael Reiter: Enhanced Multiple Output Regression based on Canonical Correlation Analysis with Applications in Computer Vision, (2001-2010), Graz University of Technology.

30. Amir Saffari: Multi-Class Semi-Supervised and Online Boosting,(2006-2010), Graz University of Technology.

31. Jakob Santner: Interactive Multi-Label Segmentation,(2007-2010), Graz University of Technology.

32. Lukas Zebedin: Automatic Reconstruction of Urban Environments from Aerial Images,(2005-2010), Graz University of Technology.

33. Markus Storer: Shape and Appearance Based Analysis of Facial Images for Assessing ICAO Compliance. (2007-2010), Graz University of Technology.

34. Stefan Kluckner: Semantic Interpretation of Digital Aerial Images Utilizing Redundancy, Appearance and 3D Information, (2007-2011), Graz University of Technology.

35. Manuel Werlberger: Convex Approaches for High Performance Video Processing. (2009-2012), Graz University of Technology.

36. Markus Unger: Convex optimization for image segmentation. (2009-2012), Graz University of Technology.

37. Hayko Riemenschneider: Object detection by partial shape matching, category models and joint segmentation. (2009-2012), Graz University of Technology.

38. Katrin Santner: Simultaneous Localization and Mapping in Dynamic Environments. (2009-2012), Graz University of Technology.

39. Inayatullah Khan: Learning from Internet Images for Object Categorization. (2008-2012), Graz University of Technology.

40. Arnold Irschara: Scalable Scene Reconstruction and Image Based Localization. (2008-2012), Graz University of Technology.

41. Markus Heber: Tracking and Visual Quality Inspection in Harsh Environments. (2009-2013), Graz University of Technology.

42. Sabine Sternig: Scene specific object detection and tracking. (2009-2013), Graz University of Technology.

NON-UNIVERSITY ACTIVITIES

- Member of European Academy of Science
- Member of Scientific Board of Joanneum Research
- CEO of Forschungsholding TU Graz
- Supervisory board Chairman of KNOW-Center Graz
- Board member of Fraunhofer Inst. für Graphische Datenverarbeitung (IGD)

- 2000–2005 Key–researcher at the K-plus Competence Center ADVANCED COMPUTER VISION, responsible for the research area IV Classification.
- Vice-President of the Austrian Society for Pattern Recognition (ÖAGM), 2003–2007.
- Secretary of the Austrian Society for Pattern Recognition (ÖAGM), 1994–2003.
- Since 1991 member of Austrian Standardization Group of ISO/IEC JTC1 SC24.

Editorial Boards/Program Committees

- Associate Editor IEEE Trans. Pattern Analysis and Machine Intelligence.
- Area Chair of ICCV 2011.
- Area Chair of CVPR 2007, 2009.
- Area Chair of ACCV 2009,2010.
- Area Chair of ECCV 2008,2010.
- Member of Editorial Board Pattern Recognition.
- Member of Editorial Board of Computing and Informatics.
- Member of Editorial Board of Universal Computer Science.
- Member of Editorial Board of Pattern Analysis and Applications, Springer Verlag, 1998–2001.
- Member of Program Committee of many scientific national and international scientific conferences, including, ECCV, CVPR, BMVC, ICPR DAGM, ICVS, ÖAGM, ICANNGA, ICANN, NIPS, CBMI, SOFSEM, etc.

CONFERENCE ORGANIZATIONS

- Chair of DAGM 2012 Graz.
- Program Co-Chairman for ECCV 2006, Graz. (more than 600 participants)
- Program Co-Chair of Computer Vision Winter Workshop CVWW 2005 in Zell an der Pram (50 participants)
- Program Co-Chairman and Co-Organizer of ECCV Workshop on Statistical Learning in Computer Vision, Prague, (65 participants).
- Program Co-Chairman of International Conference on Artificial Neural Networks (ICANN) 2001, Vienna, (300 participants).
- Program Co-Chairman and Co-Organizer of ICANN Workshop on Kernel and Subspace Methods for Computer Vision (30 participants).
- Local Organizer of 13. Int. Conference on Pattern Recognition and Image Processing (ICPR) 1996, Vienna, (1000 participants).

- Member of Organizing Committee and Co-editor of proceedings of 16.DAGM & 18. ÖAGM Workshop 1994, Technical Univ. of Vienna, (300 participants).
- Co-Chairman, 16.ÖAGM conference, Technical Univ. of Vienna, May 6-8, 1992 (80 participants).

AWARDS

1. Award of the Austrian working group for Pattern Recognition: ÖAGM-Preis 1989 for presentation and paper [1].
2. Siemens Best Paper Presentation Award at NC-1998, for presentation [50].
3. 29th Pattern Recognition Society award for paper [17].
4. Best paper award at Joint Hungarian-Austrian Conference on Image Processing and Pattern Recognition 2005 for paper [166].
5. Best paper award at Computer Vision Winter Workshop 2007, for paper [222].
6. Best paper award at IEEE International Conference on Research, Inovation and Vision for the Future (RIVF'07), for paper [233].
7. Best paper award at 3rd Embedded Computer Vision Workshop at CVPR07, for paper [232].
8. Best Science Paper Prize British Machine Vision Conference 2007, for paper [236].
9. DAGM Main Prize 2007, for paper [239].
10. INGE St. Research award 2007 in the category best paper, for paper [49].
11. 19th ICPR 2008, Best Scientific Paper award, for paper [288].
12. 33rd AAPR 2009, Best Paper award, for paper [301].
13. U.V. Helava Award of ISPRS Journal for paper [51].
14. Photogrametric Computer Vision (PCV2010), Best paper award, for paper [350].
15. 20th ICPR 2010, Best Scientific Paper award, for paper [366].
16. Workshop on Projector Camera Systems, Best paper honorable mention, for paper [385]
17. DAGM-ÖAGM Main Price, 2012, for paper [425].
18. Best Paper Award ACCV 2012, for paper [429].
19. Best Demo Prize BMVC 2012, for paper [430].

List of Publications
H. Bischof

Books/Editor

[1] Horst Bischof and Walter Kropatsch, editors. *Pattern Recognition 1992*, volume 62 of *OCG-Schriftenreihe*. Oldenbourg, 1992.

[2] Walter Kropatsch and Horst Bischof, editors. *Mustererkennung 1994*, volume 5 of *Informatik Xpress*. Springer Verlag Berlin, 1994.

[3] Horst Bischof. *Pyramidal Neural Networks*. Lawrence Erlbaum Associates, 1995.

[4] W.G. Kropatsch and H. Bischof, editors. *Digital Image Analysis: Selected Techniques and Applications*. Springer New York, 2001.

[5] G. Dorffner, H. Bischof, and K. Hornik, editors. *Artifical Neural Networks-ICANN 2001*, volume 2130 of *LNCS*. Springer, 2001.

[6] A. Leonardis and H. Bischof, editors. *Proc. of ICANN-01 Workshop on Kernel and Subspace Methods for Computer Vision*, 2001.

[7] A. Leonardis and H. Bischof, editors. *Special Issue Pattern Recognition: Kernel and Subspace Methods for Computer Vision*, volume 36, 2003.

[8] A. Leonardis and H. Bischof, editors. *Proc. of the ECCV04 Workshop on Statistical Learning in Computer Vision*, 2004.

[9] A. Hanbury and H. Bischof, editors. *Proceedings of the 10th Computer Vision Winter Workshop CVWW 2005*, 2005.

[10] A. Leonardis, H. Bischof, and A. Pinz, editors. *Computer Vision-ECCV 2006, 9th European Conference on Computer Vision*, number 3951–3954 in LNCS. Springer, 2006.

[11] F. Porikli, H. Bischof, and H. Grabner, editors. *3rd IEEE On-line Learning for Computer Vision Workshop*. IEEE, 2009.

[12] Axel Pinz, Thomas Pock, Horst Bischof, and Franz Leberl, editors. *Pattern Recognition - Joint 34th DAGM and 36th OAGM Symposium, Graz, Austria, August 28-31, 2012. Proceedings*, volume 7476 of *Lecture Notes in Computer Science*. Springer, 2012.

Journal Papers

[1] Horst Bischof, Werner Schneider, and Axel Pinz. Multispectral classification of landsat-images using neural networks. *IEEE Transactions on Geoscience and Remote Sensing*, 30(3):482–490, 1992.

[2] Horst Bischof and Axel Pinz. Artificial versus real neural networks. *Behavioral and Brain Sciences*, 15(4):712, 1992.

[3] Axel Pinz, Marek B. Zaremba, Horst Bischof, Francois A. Gougeon, and Michel Locas. Neuromorphic methods for recognition of compact image objects. *Int. Journal on Machine Graphics & Vision*, 2(3):209–229, 1993.

[4] Etienne Bertin, Horst Bischof, and Pascal Bertolino. Voronoi Pyramids controlled by Hopfield networks. *Computer Vision and Image Understanding*, 63(3):462–475, May 1996.

[5] Aleš Leonardis and Horst Bischof. Robust recovery of eigenimages in the presence of outliers and occlusions. *Journal of Computing and Information Technology*, CIT 4(1):25–36, 1996.

[6] Andreas Weingessel, Horst Bischof, Kurt Hornik, and Friedrich Leisch. Adaptive combination of PCA and VQ networks. *IEEE Transactions on Neural Networks*, 8(5):1208–1211, 1997.

[7] Horst Bischof and Aleš Leonardis. Finding optimal neural networks for land use classification. *IEEE Trans. Geoscience and Remote Sensing*, 36(1):337–341, 1998.

[8] Horst Bischof. Locality, modularity, and computational neural networks. *Behavioral and Brain Sciences*, 20(3):516–517, 1997.

[9] Aleš Leonardis and Horst Bischof. An efficient MDL-Based construction of RBF networks. *Neural Networks*, 11(5):963–973, July 1998.

[10] Walter G. Kropatsch, Aleš Leonardis, and Horst Bischof. Hierarchical, adaptive, and robust methods for image understanding. *Surveys on Mathematics for Industry*, 9:1–47, 1999.

[11] Horst Bischof and Rudi Frühwirt. Recent developments in pattern recognition with applications in high energy physics. *Nuclear Instruments and Methods in Physics Research*, A(419):259–269, 1998.

[12] Horst Bischof, Ales Leonardis, and Alexander Selb. MDL Principle for robust vector quantization. *Pattern Analysis and Applications*, 2(1):59–72, 1999.

[13] Aleš Leonardis and Horst Bischof. Robust recognition using eigenimages. *Computer Vision and Image Understanding*, 78(1):99–118, 2000.

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