Curriculum Vitae — Roland Kwitt

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Birth Date March 19, 1982
Citizenship Austrian
Academic Details *h*-index: 23, Cites: 1844 (Source: Google Scholar, 01/2020)
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Current Employment

2017–today **University of Salzburg**
Associate Professor
Department of Computer Science
Jakob-Haringer Str. 2, A-5020 Salzburg, Austria
Phone: +43 (0) 662 8044-6311

2013–2017 **University of Salzburg**
Assistant Professor
Department of Computer Science
Jakob-Haringer Str. 2, A-5020 Salzburg, Austria

Previous Employers

2011-2013 **Kitware Inc.**
R & D Engineer, Computer Vision / Medical Imaging Group
101 E Weaver St., NC 27510, USA
Supervisor(s): Stephen Aylward, Brad Davis

Education

2010-2011 *PostDoc*, CS department, University of Salzburg (Advisor(s): Andreas Uhl, Wolfgang Pree)
2007-2010 *Dr. techn. (equiv. to PhD)*, CS department, University of Salzburg (Advisor: Andreas Uhl)
2005-2007 *Dipl.-Ing. (equiv. to MsC)*, CS department, University of Salzburg (Advisor: Ulrich Hofman)
2001-2005 *Dipl.-Ing. (FH) (equiv. MsC)*, Telecommunications Engineering, University of Applied Sciences Salzburg (Advisor: Ulrich Hofman)

Awards

2014 CVPR '14 Outstanding Reviewer
2012 Short-listed for the "Heinz-Zemanek" price 2012 (notification e-mail upon request)
2012 **MICCAI '12 Young Investigator Award**, awarded at MICCAI '12 (Nice, France)
2007 **Best Paper Award**, International Conference on Computer Recognition Systems (CORES '07)
2005 **Special Appreciation Award**, Austrian Ministry of Science and Research

Main Research Areas

Machine learning, Computer vision & Medical image analysis

Funding & Projects

2018 *Deep Homological Learning*
Funding source: FWF
Funding amount: € 225,000.-

2018 *Kundenfokussierte Zukunftstrends (KFZ)*
(together with Assoc.-Prof. Dr. Wolfgang Trutschnig, Department of Mathematics, University of Salzburg)
Funding source: Land Salzburg
Industrial cooperation partner: Porsche Informatik GmbH
Funding amount: € 430,000.-

2018-2019 *"Kleinprojekte" Critical data & Feature selection*
(together with Assoc.-Prof. Dr. Wolfgang Trutschnig, Department of Mathematics, University of Salzburg)
Funding source: Porsche Informatik GmbH
Industrial cooperation partner: Porsche Informatik GmbH
Funding amount: € 40,000.-

2018-2019 *Data Analytics in Industrial Environments*
(together with Assoc.-Prof. Dr. Wolfgang Trutschnig, Department of Mathematics, University of Salzburg)
Industrial partner: Siemens Austria
Funding amount: € 20,000.-

2018 *Synonym Analysis for Improving Search Queries*
(together with Prof. Dr. Nikolaus Augsten, Department of Computer Science, University of Salzburg)
Industrial partner: FindoLogic GmbH
Founding source: FFG (Innovationsscheck 5,000)
Funding amount: € 5,000.-

Student Supervision

Primary PhD advisor

- Christoph D. Hofer (ongoing, will graduate in Jan. 2020)
- Florian Graf (ongoing)
- Sebastian Zeng (ongoing)

Secondary PhD advisor

- Simon Kirchgasser (ongoing)
- Kastner Michael (ongoing)
- Debiasi Luca (ongoing)
- González Tejeda Yansel (ongoing)
- Höller Yvonne (ongoing)
- Schraml Rudolf (ongoing)
- Ribeiro Eduardo (completed)
- Mann Willi (completed, now at Celonis)
- Wimmer Georg (completed, now PostDoc at Univ. of Salzburg)
- Kauba Christof (completed, now PostDoc at Univ. of Salzburg)

MSc advisor

- Söllinger Dominik (ongoing)
- Peer Raphael (ongoing)
- Grafendorfer Philipp (ongoing)
- Nina Schmitzberger (ongoing)
- Johanna Wald (completed, now at TU Munich)

Publications (in reverse-chronological order)

Journal Articles

[CRM19] C. Hofer, R. Kwitt, and M. Niethammer. "Learning Representations of Persistence Barcodes". In: *Journal of Machine Learning Research* 20.126 (2019), pp. 1–45. URL: http://jmlr.org/papers/v20/18-358.html.

[G W+19] G. Wimmer, M. Gadermayr, G. Wolkersdörfer, R. Kwitt, T. Tamaki, J. Tischendorf, M. Häfner, S. Yoshida, S. Tanaka, D. Merhof, and A. Uhl. "Quest for the best endoscopic imaging modality for computer-assisted colonic polyp staging". In: *World Journal of Gastroenterology* 25.10 (2019), pp. 1197–1209. DOI: 10.3748/wjg.v25.i10.1197.

[N S+19] N. Stanley, T. Bonacci, R. Kwitt, M. Niethammer, and P.J. Mucha. "Stochastic Block Models with Multiple Continuous Attributes". In: *Applied Network Science* 4.54 (2019). DOI: 10.1007/s41109-019-0170-z.

[Z D+19] Z. Ding, G. Fleishman, X. Yang, P. Thompson, R. Kwitt, M. Niethammer, and ADNI. "Fast predictive simple geodesic regression". In: *Medical Image Analysis* 56 (2019), pp. 193–209. DOI: 10.1016/j.media.2019.06.003.

[DR +18] D.R. Chittajallu, M. McCormick, S. Gerber, T.J. Czernuszewicz, R. Gessner, M.S. Willis, M. Niethammer, R. Kwitt, and S.R. Aylward. "Image-Based Methods for Phase Estimation, Gating, and Temporal Superresolution of Cardiac Ultrasound". In: *IEEE Transactions on Biomedical Engineering* 66.1 (2018), pp. 72–79. DOI: 10.1109/TBME.2018.2823279.

[G W+18] G. Wimmer, M. Gadermayr, R. Kwitt, M. Häfner, T. Tamaki, S. Yoshida, S. Tanaka, D. Merhof, and A. Uhl. "Training of polyp staging systems using mixed imaging modalities". In: *Computers in Biology and Medicine* 102 (2018), pp. 251–259. DOI: 10.1016/j.compbiomed.2018.05.003.

[N S+18] N. Stanley, R. Kwitt, M. Niethammer, and P.J. Mucha. "Compressing Networks with Super Nodes". In: *Scientific Reports* 8.10892 (2018). DOI: 10.1038/s41598-018-29174-3.

[X H+18] X. Han, R. Kwitt, S. Aylward, S. Bakas, B. Menze, A. Asturias, P. Vespa, J. Van Horn, and M. Niethammer. "Brain extraction from normal and pathological images: A joint PCA/Image-Reconstruction approach". In: *NeuroImage* 176 (2018), pp. 431–445. DOI: 10.1016/j.neuroimage.2018.04.073.

[Yan+17] X. Yang, R. Kwitt, M. Styner, and M. Niethammer. "Quicksilver: Fast Predictive Image Registration - a Deep Learning Approach". In: *NeuroImage* 158 (2017), pp. 378–396. DOI: 10.1016/j.neuroimage.2017.07.008.

[Hon+16a] Y. Hong, R. Kwitt, N. Singh, N. Vasconcelos, and M. Niethammer. "Parametric Regression on the Grassmannian". In: *IEEE Transactions on Pattern Analysis and Machine Intelligence* 38.11 (Nov. 2016). DOI: 10.1109/TPAMI.2016.2516533.

[Liu+15a] X. Liu, M. Niehthammer, R. Kwitt, N. Singh, M. McCormick, and S. Aylward. "Low-Rank Atlas Image Analyses in the Presence of Pathologies". In: *IEEE Transactions on Medical Imaging* 34.12 (Dec. 2015), pp. 2583–2591. DOI: 10.1109/TMI.2015.2448556.

[Hon+14c] Y. Hong, B. Davis, J. S. Marron, R. Kwitt, N. Singh, J. S. Kimbell, E. Pitkina, R. Superfine, S.D. Davis, C. J. Zdanski, and M. Niethammer. "Statistical atlas construction via weighted functional boxplots". In: *Medical Image Analysis* 18.4 (May 2014), pp. 684–698. DOI: 10.1016/j.media.2014.03.001.

[Kwi+13b] R. Kwitt, N. Vasconcelos, S. Razzaque, and S. Aylward. "Localizing Target Structures in Ultrasound Video - A Phantom Study". In: *Medical Image Analysis* 17.7 (Oct. 2013), pp. 712–722. DOI: 10.1016/j.media.2013.05.003.

[Kwi+12b] R. Kwitt, N. Vasconcelos, N. Rasiwasia, A. Uhl, B. Davis, M. Häfner, and F. Wrba. "Endoscopic Image Analysis in Semantic Space". In: *Medical Image Analysis* 16.7 (Oct. 2012), pp. 1415–1422. DOI: 10.1016/j.media.2012.04.010.

[KMU11a] R. Kwitt, P. Meerwald, and A. Uhl. "Efficient Texture Image Retrieval Using Copulas in a Bayesian Framework". In: *IEEE Transactions on Image Processing* 20.7 (July 2011), pp. 2063–2077. DOI: 10.1109/TIP.2011.2108663.

[KMU11b] R. Kwitt, P. Meerwald, and A. Uhl. "Lightweight Detection of Additive Watermarking in the DWT-Domain". In: *IEEE Transactions on Image Processing* 20.2 (Feb. 2011), pp. 474–484. DOI: 10.1109/TIP.2010.2064327.

[KU10a] R. Kwitt and A. Uhl. "Lightweight Probabilistic Texture Retrieval". In: *IEEE Transactions on Image Processing* 19.1 (Jan. 2010), pp. 241–253. DOI: 10.1109/TIP.2009.2032313.

[Haf+09a] M. Häfner, R. Kwitt, A. Uhl, A. Gangl, F. Wrba, and A. Vécsei. "Feature-Extraction from Multi-Directional Multi-Resolution Image Transformations for the Classification of Zoom-Endoscopy Images". In: *Pattern Analysis and Applications* 12.4 (Dec. 2009), pp. 407–413. DOI: 10.1007/s10044-008-0136-8.

[Haf+08a] M. Häfner, R. Kwitt, A. Uhl, A. Gangl, F. Wrba, and A. Vécsei. "Computer-assisted Pit-Pattern Classification in Different Wavelet Domains for Supporting Dignity Assessment of Colonic Polyps". In: *Pattern Recognition* 42.6 (Sept. 2008), pp. 1180–1191. DOI: doi:10.1016/j.patcog.2008.07.012.

Conference Articles

[C H+19] C. Hofer, R. Kwitt, M. Dixit, and M. Niethammer. "Connectivity-Optimized Representation Learning via Persistent Homology". In: *ICML*. 2019.

[MF19] M. Niethammer and R. Kwitt F.-X. Vialard. "Metric Learning for Image Registration". In: *CVPR*. 2019.

[Liu+18a] B. Liu, M. Dixit, R. Kwitt, and N. Vasconcelos. "Feature Space Transfer for Data Augmentation". In: *CVPR*. 2018.

[Gre+18] H. Greer, S. Gerber, M. Niethammer, R. Kwitt, M. McCormick, D. Chittajallu, N. Siekierski, M. Oetgen, K. Cleary, and S. Aylward. "Scoliosis Screening and Monitoring Using Self Contained Ultrasound and Neural Networks". In: *ISBI*. 2018.

[Dix+17] M. Dixit, R. Kwitt, M. Niethammer, and N. Vasconcelos. "AGA: Attribute-Guided Augmentation". In: *CVPR*. 2017.

[Han+17] X. Han, X. Yang, R. Kwitt, and M. Niethammer. "Efficient Registration of Pathological Images: A joint PCA/Image-Reconstruction Approach". In: *ISBI*. 2017.

[Hof+17a] C. Hofer, R. Kwitt, Y. Höller, E. Trinka, M. Niethammer, and A. Uhl. "Constructing Shape Spaces from a Topological Perspective". In: *IPMI*. 2017.

[Hof+17b] C. Hofer, R. Kwitt, Y. Höller, E. Trinka, and A. Uhl. "Simple Domain Adaptation for Cross-Dataset Analyses of Brain MRI Data". In: *ISBI*. 2017.

[Hof+17c] C. Hofer, R. Kwitt, M. Niethammer, and A. Uhl. "Deep Learning with Topological Signatures". In: *NIPS*. 2017.

[Hon+17] Y. Hong, X. Yang, R. Kwitt, M. Styner, and M. Niethammer. "Regression Uncertainty on the Grassmannian". In: *AISTATS*. 2017.

[Yan+17] X. Yang, R. Kwitt, M. Styner, and M. Niethammer. "Fast Predictive Multimodal Image Registration". In: *ISBI*. 2017.

[Gad+16a] M. Gadermayr, S. Hegenbart, R. Kwitt, and A. Uhl. "Narrow Band Imaging Versus White-Light: What is best for Computer-Assisted Diagnosis of Celiac Disease?" In: *ISBI*. 2016.

[KHN16a] R. Kwitt, S. Hegenbart, and M. Niethammer. "One-Shot Learning of Scene Locations via Feature Trajectory Transfer". In: *CVPR*. 2016.

[Ayl+16a] S. Alyward, M. McCormick, H.J. Kang, S. Razzaque, R. Kwitt, and M. Niethammer. "Ultrasound Spectroscopy". In: *ISBI*. 2016.

[Yan+16] X. Yang, X. Han, E. Park, S. Aylward, R. Kwitt, and M. Niethammer. "Registration of Pathological Images". In: *Proceedings of the MICCAI Workshop on Simulation and Synthesis in Medical Imaging*. 2016.

[YKN16] X. Yang, R. Kwitt, and M. Niethammer. "Fast Predictive Image Registration". In: *Proceedings of the MICCAI Workshop on Deep Learning in Medical Image Analysis*. 2016.

[Kwi+15a] R. Kwitt, S. Huber, M. Niethammer, W. Lin, and U. Bauer. "Statistical Topological Data Analysis – A Kernel Perspective". In: *NIPS*. 2015. URL: http://goo.gl/GAz8s0.

[Rei+15a] R. Reininghaus, U. Bauer, S. Huber, and R. Kwitt. "A Stable Multi-scale Kernel for Topological Machine Learning". In: *CVPR*. 2015. DOI: 10.1109/CVPR.2015.7299106.

[Hon+15a] Y. Hong, N. Singh, R. Kwitt, and M. Niethammer. "Group Testing for Longitudinal Data". In: *IPMI*. 2015. DOI: 10.1007/978-3-319-19992-4_11.

[HKN15a] Y. Hong, R. Kwitt, and M. Niethammer. "Model Criticism for Regression on the Grassmannian". In: *MICCAI*. 2015. DOI: 10.1007/978-3-319-24574-4_87.

[Hon+14a] Y. Hong, N. Singh, R. Kwitt, and M. Niethammer. "Time-warped Geodesic Regression". In: *MICCAI*. 2014. DOI: 10.1007/978-3-319-10470-6_14.

[Kwi+14a] R. Kwitt, S. Razzaque, J. Lowell, and S. Aylward. "Variability sensitivity of dynamic texture based recognition in clinical CT data". In: *SPIE Medical Imaging*. 2014. DOI: 10.1117/12.2043271.

[Liu+14a] X. Liu, M. Niethammer, R. Kwitt, M. McCormick, and S. Aylward. "Low-Rank to the Rescue: Atlas-based Analyses in the Presence of Pathologies". In: *MICCAI*. 2014. DOI: 10.1007/978-3-319-10443-0_13.

[Heg+14a] S. Hegenbart, R. Kwitt, N. Rasiwasia, A. Vécsei, and A. Uhl. "Do We need Annotation Experts? A Case Study in Celiac Disease Classification". In: *MICCAI*. 2014. DOI: 10.1007/978-3-319-10470-6_57.

[Hon+14b] Y. Hong, R. Kwitt, N. Singh, B. Davis, and M. Niethammer. "Geodesic Regression on the Grassmannian". In: *ECCV*. 2014. DOI: 10.1007/978-3-319-10605-2_41.

[Hon+13a] Y. Hong, B. Davis, J.S. Marron, R. Kwitt, and M. Niethammer. "Weighted Functional Boxplot with Application to Statistical Atlas Construction". In: *MICCAI*. 2013. DOI: 10.1007/978-3-642-40760-4_73.

[Kwi+13a] R. Kwitt, D. Pace, M. Niethammer, and S. Aylward. "Studying Cerebral Vasculature Using Structure Proximity and Graph Kernels". In: *MICCAI*. 2013. DOI: 10.1007/978-3-642-40763-5_66.

[KVR12a] R. Kwitt, N. Vasconcelos, and N. Rasiwasia. "Scene Recognition on the Semantic Manifold". In: *ECCV*. 2012. DOI: 10.1007/978-3-642-33765-9_26.

[Kwi+12a] R. Kwitt, N. Vasconcelos, S. Razzaque, and S. Alyward. "Recognition in Ultrasound Videos: Where Am I?" In: *MICCAI*. 2012. DOI: 10.1007/978-3-642-33454-2_11.

[Gsc+11a] M. Gschwandtner, R. Kwitt, W. Pree, and A. Uhl. "Infrared Camera Calibration for Dense Depth Map Construction". In: *IV*. 2011. DOI: 10.1109/IVS.2011.5940515.

[GKU11a] M. Gschwandtner, R. Kwitt, and A. Uhl. "BlenSor: Blender Sensor Simulation Toolbox". In: *ISVC*. 2011. DOI: 10.1007/978-3-642-24031-7_20.

[Kwi+11b] R. Kwitt, P. Meerwald, A. Uhl, and G. Verdoolaege. "Testing a Multivariate Model for Wavelet Coefficients". In: *ICIP*. 2011. DOI: 10.1109/ICIP.2011.6115667.

[Kwi+11a] R. Kwitt, N. Rasiwasia, N. Vasconcelos, A. Uhl, M. Häfner, and F. Wrba. "Learning Pit Pattern Concepts for Gastroenterological Training". In: *MICCAI*. 2011. DOI: 10.1007/978-3-642-23626-6_35.

[Hub+10a] S. Huber, R. Kwitt, P. Meerwald, M. Held, and A. Uhl. "Watermarking of 2D Vector Graphics with Distortion Constraint". In: *ICME*. 2010. DOI: 10.1109/ICME.2010.5583049.

[Kwi+10a] R. Kwitt, A. Uhl, M. Häfner, A. Gangl, F. Wrba, and A. Vécsei. "Predicting the Histology of Colorectal Lesions in a Probabilistic Framework". In: *MMBIA*. 2010. DOI: 10.1109/CVPRW.2010.5543146.

[Haf+09b] M. Häfner, A. Gangl, R. Kwitt, A. Uhl, A. Vécsei, and F. Wrba. "Improving Pit-Pattern Classification of Endoscopy Images by a Combination of Experts". In: *MICCAI*. 2009. DOI: 10.1007/978-3-642-04268-3_31.

[Heg+09c] S. Hegenbart, R. Kwitt, M. Liedlgruber, A. Uhl, and A. Vécsei. "Impact of Duodenal Image Capturing Techniques and Duodenal Regions on the Performance of Automated Diagnosis of Celiac Disease". In: *ISPA*. 2009. DOI: 10.1109/ISPA.2009.5297637.

[KMU09d] R. Kwitt, P. Meerwald, and A. Uhl. "A Joint Model of Complex Wavelet Coefficients for Texture Retrieval". In: *ICIP*. 2009. DOI: 10.1109/ICIP.2009.5413656.

[KMU09c] R. Kwitt, P. Meerwald, and A. Uhl. "Efficient Detection of Additive Watermarking in the DWT-Domain". In: *EUSIPCO*. 2009. URL: http://goo.gl/lS4clA.

[KMU09b] R. Kwitt, P. Meerwald, and A. Uhl. "Blind DT-CWT Domain Additive Spread-Spectrum Watermark Detection". In: *DSP*. 2009. DOI: 10.1109/ICDSP.2009.5201255.

[KMU09a] R. Kwitt, P. Meerwald, and A. Uhl. "Color-Image Watermarking using Multivariate Power-Exponential Distribution". In: *ICIP*. 2009. DOI: 10.1109/ICIP.2009.5413715.

[Haf+08b] M. Häfner, R. Kwitt, F. Wrba, A. Gangl, A. Vécsei, and A. Uhl. "One-Against-One Classification for Zoom-Endoscopy Images". In: *MEDSIP*. 2008. DOI: 10.1049/cp:20080453.

[KU08b] R. Kwitt and A. Uhl. "Color Eigen-Subband Features for Endoscopy Image Classification". In: *ICASSP*. 2008. DOI: 10.1109/ICASSP.2008.4517678.

[KU08a] R. Kwitt and A. Uhl. "Image Similarity Measurement by Kullback-Leibler Divergences between Complex Wavelet Subband Statistics for Texture Retrieval". In: *ICIP*. 2008. DOI: 10.1109/ICIP.2008.4711909.

[KU07a] R. Kwitt and A. Uhl. "Modeling the Marginal Distributions of Complex Wavelet Coefficient Magnitudes for the Classification of Zoom-Endoscopy Images". In: *MMBIA*. 2007. DOI: 10.1109/ICCV.2007.4409170.

Theses

[Kwitt10a] R. Kwitt. "Statistical Modeling in the Wavelet Domain and Applications". PhD thesis. Department of Computer Science, University of Salzburg, Austria, 2010.

Conference Talks & Presentations

09/2019 *Deep Homological Learning*, ÖMG Conference '19, Dornbirn, Austria
06/2019 *Metric Learning for Image Registration*, CVPR '19, Long Beach, CA, USA
06/2019 *Connectivity-Optimized Representation Learning via Persistent Homology*, ICML '19, Long Beach, CA, USA
06/2016 *One-Shot Learning of Scene Locations via Feature Trajectory Transfer*, CVPR '16, Las Vegas, NV, USA
12/2015 *Statistical Topological Data Analysis – A Kernel Perspective*, NIPS '15, Montreal, Canada
10/2015 *Model Criticism for Regression on the Grassmannian*, MICCAI '15, Munich, Germany
06/2015 *A Stable Multi-Scale Kernel for Topological Machine Learning*, CVPR '15, Boston, USA
09/2014 *Geodesic Regression on the Grassmannian*, ECCV '14, Zurich, Switzerland
09/2014 *Do we need Annotation Experts – A Case Study in Celiac Disease Classification*, MICCAI '14, Boston, USA
09/2014 *Low-Rank to the Rescue – Atlas-based Analyses in the Presence of Pathologies*, MICCAI '14, Boston, USA
10/2013 *Studying Cerebral Vasculature Using Structure Proximity and Graph Kernels*, MICCAI '13, Nagoya, Japan
10/2012 *Scene Recognition on the Semantic Manifold*, ECCV '12, Florence, Italy
10/2012 *Recognition in US Video: Where Am I?*, MICCAI '12, Nice, France
09/2011 *Learning Pit Pattern Concepts for Gastroenterological Training*, MICCAI '11, Toronto, Canada
08/2010 *Statistical Modeling in the Wavelet Domain and Applications*, PhD defense, Salzburg, Austria
11/2009 *A Joint Model of Complex Wavelet Coefficients for Texture Retrieval*, ICIP '09, Cairo, Egypt
11/2009 *Color-Image Watermarking using Multivariate Power-Exponential Distribution*, ICIP '09, Cairo, Egypt
09/2009 *Improving Pit Pattern Classification by a Combination of Experts*, MICCAI '09, London, UK
10/2008 *Image Similarity Measurement by Kullback-Leibler Divergences between Complex Wavelet Subband Statistics for Texture Retrieval*, ICIP '08, San Diego, CA, USA
04/2008 *Color Eigen-Subband Features for Endoscopy Image Classification*, ICASSP '08, Las Vegas, NV, USA
10/2007 *Modeling the Marginal Distributions of Complex Wavelet Coefficient Magnitudes for the Classification of Zoom-Endoscopy Images*, MMBIA '07, Rio de Janeiro, Brazil

Invited Talks

01/2018 *Machine Learning with Topological Signatures*
Oberwolfach Workshop "Statistics for Data with Geometric Structure", Oberwolfach, Germany
04/2016 *Low rank to the Rescue: Atlas-based Analyses in the Presence of Pathologies*
"Images and Networks of the Brain", Hamburg, Germany (invited by R. Werner)
07/2015 *Topological Machine Learning*
ISNPS '15, Graz Austria (invited by J.S. Marron)
04/2014 *Grassmannian Geodesic Regression*
IST Austria, Austria (invited by Edelsbrunner group)
06/2013 *Localizing Target Structures In Ultrasound Videos*
Quantitative Medical Imaging (QMI), Arlington, VA, USA
12/2012 *Scene Recognition on the Semantic Manifold*
SVCL, UC San Diego, USA (invited by N. Vasconcelos)
10/2012 *Recognition in US Video: Where Am I?* UNC, Chapel Hill (Computer Science), NC, USA

Teaching

Winter '19 Computer Vision (graduate level), University of Salzburg
Winter '19 Introduction to Data Science (graduate level)
Winter '19 Case Studies (graduate level)
Winter '19 BSc Seminar (undergraduate level)
Winter '19 Interpreting and Presenting Statistical Analyses (graduate level), University of Salzburg
Summer '19 Seminar Multimedia Technologies (graduate level, with A. Uhl), University of Salzburg
Summer '19 Databases 1 – Proseminar (undergraduate level), University of Salzburg
Summer '19 Machine Learning (graduate level), University of Salzburg
Winter '18 Seminar Multimedia Technologies (graduate level), University of Salzburg
Winter '18 Computer Vision (graduate level), University of Salzburg
Winter '18 Introduction to Data Science (graduate level)
Winter '18 Case Studies (graduate level)
Winter '18 BSc Seminar (undergraduate level)
Summer '17 Machine Learning (graduate level), University of Salzburg
Summer '17 Databases 1 (undergraduate level), University of Salzburg
Summer '17 Databases 1 – Proseminar (undergraduate level), University of Salzburg
Summer '17 Seminar Multimedia Technologies (graduate level), University of Salzburg
Winter '16 Seminar Multimedia Technologies (graduate level), University of Salzburg
W inter '16 Computer Vision (graduate level), University of Salzburg
Winter '16 Computer Science for Everyone (undergraduate level), University of Salzburg
Winter '16 Introduction to Data Science (graduate level), University of Salzburg
Summer '16 Seminar Multimedia Technologies (graduate level), University of Salzburg
Summer '16 Databases 1 – Proseminar (undergraduate level), University of Salzburg
Summer '16 Imaging Beyond Consumer Cameras (graduate level), University of Salzburg
Winter '16 Seminar Multimedia Technologies (graduate level), University of Salzburg
Winter '16 Advanced Image Processing & Computer Vision (graduate level), University of Salzburg
Summer '15 Seminar Multimedia Technologies (graduate level), University of Salzburg
Summer '15 Databases 1 – Proseminar (undergraduate level), University of Salzburg
Summer '15 Machine Learning (graduate level), University of Salzburg
Winter '15 Seminar Multimedia Technologies (graduate level), University of Salzburg
Winter '15 Advanced Image Processing & Computer Vision (graduate level), University
Summer '14 Databases 1 – Proseminar (undergraduate level), University of Salzburg
Summer '14 Imaging Beyond Consumer Cameras (graduate level), University of Salzburg
Winter '13 Advanced Image Processing & Computer Vision(graduate level), University of Salzburg
Winter '11 Introduction to OO Programming (undergraduate level), University of Applied Sciences Salzburg
Winter '05 Network Management (undergraduate level), University of Applied Sciences Salzburg

Professional Service

General Chair of the 39th OAGM/AAPR Workshop 2015, Salzburg, Austria
PC Chair of ACM IH & MMSEC 2014, Salzburg, Austria

Journal reviewing

Reviewer for *Journal of Machine Learning Research*
Reviewer for *IEEE Transactions on Medical Imaging*
Reviewer for *IEEE Transactions on Image Processing*
Reviewer for *IEEE Transactions on Signal Processing*
Reviewer for *IEEE Signal Processing Letters*
Reviewer for *Elsevier Medical Image Analysis*
Reviewer for *Foundations of Computational Mathematics*

Conference reviewing

Reviewer for *International Conference on Learning Representations (ICLR)*
Reviewer for *International Conference on Machine Learning (ICML)*
Reviewer for *Artificial Intelligence and Statistics (AISTATS)*
Reviewer for *Neural Information Processing Systems (NIPS)*
Reviewer for *IEEE International Conference on Image Processing (ICIP)*
Reviewer for *Medical Image Computing and Computer Assisted Intervention (MICCAI)*
Reviewer for *International Conference on Computer Vision (ICCV)*
Reviewer for *Computer Vision and Pattern Recognition (CVPR)*
Reviewer for *European Conference on Computer Vision (ECCV)*
Reviewer for *British Machine Vision Conference (BMVC)*
Reviewer for *International Conference on Pattern Recognition (ICPR)*

References

Available upon request.

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