Curriculum Vitae

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Contact Information

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Work address	·	NTNU, P. O. Box 191, N-2802 Gjøvik
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Personal Information

Date of birth	·	14th October 1971
Place of birth	·	Bergen, Norway
Nationality	·	Norwegian
Languages	·	Norwegian (native), English (fluent), German (moderate), Italian (basic)

Work Experience

2016–	·	Professor, Dept. of Computer Science, NTNU – Norwegian University of Science and Technology
2012–2015	·	Professor, Dept. of Computer Science and Media Technology, Gjøvik University College
2000–2012	·	Associate Professor, Dept. of Computer Science and Media Technology, Gjøvik University College
1999	·	Research Scientist, SINTEF Materials Technology, Oslo
1996–1999	·	PhD student, SINTEF Materials Technology, Oslo
1996	·	Research Scientist, FFI, Kjeller

Education

2008	·	University pedagogics (15 ECTS credits), Gjøvik University College
1997–2000	·	Dr. Scient. (PhD), University of Oslo, Department of Mathematics
1990–1994	·	Siv.ing. (MSc), NTH, Department of Physics
1987–1990	·	High school, Tranberg videregående skole, Gjøvik

Administrative Roles

2013–2021 · Study programme leader for Bachelor of Engineering – Computer Science
2017 · Member of the board of the IE faculty at NTNU
2016 · Member of the board of NTNU in Gjøvik
2012–2016 · Member of the PhD admission board of Gjøvik University College
2012–2015 · Elected member of the board of Gjøvik University College
2012–2013 · Vice Dean of Education, IMT, Gjøvik University College

Mobility

2005 · Four months as a visiting researcher at Università degli studi di Milano, Italy
1999 · Four months as a visiting researcher at EPFL – Ecole Polytechnique Federale de Lausanne, Switzerland

Awards

2024 · Editor's pick for Optics Express paper with Luvin M. Ragoo and Jan H. Wold
2022 · Best student paper award at IS&T CIC with Mathieu Nguyen and Jean-Baptiste Thomas
2015 · Best paper award at IEEE SITIS with Steven Le Moan
2012 · Charles E. Ives award from IS&T together with Øyvind Kolås and Alessandro Rizzi
2012 · Best paper award at IS&T CGIV with Gabriele Simone.
2012 · The regional R&D prize with the Norwegian Colour and Visual Computing Laboratory

Peer Reviewing

PhD Theses

2022 · Reviewer, member of the jury, and fist opponent for Nicoletta Prencipe, University of Bordeaux, France
2018 · Reviewer, member of the jury, and opponent for Oleksandr Semeniuta, Chalmers University of Technology, Gothenburg, Sweden
2017 · Reviewer, member of the jury, and opponent for Syed Waqas Zamir, Universitat Pompeu Fabra, Barcelona,

Spain

2011 · Reviewer, member of the jury, and first opponent for Shaohua Chen, Université Paris 13, France

2006 · Reviewer for Davide Gadia, Università degli Studi di Milano, Italy

Journals

2020– · Journal of Mathematical Imaging and Vision

2016– · Signal Processing: Image Communication

2016– · Robotics and Autonomous Systems

2016– · Communications of the ACM

2016– · Sensors

2016– · IET Image Processing

2016– · Journal of Mathematics and Music

2012– · IEEE Transactions on Control Systems Technology

2011– · Signal, Image and Video Processing

2011– · EURASIP Journal on Advances in Signal Processing

2011– · Optical Engineering

2010– · Journal of the Optical Society of America A

2008– · Journal of Imaging Science and Technology

2007– · IEEE Transactions on Image Processing

2007– · Color Research and Application

2005– · Journal of Electronic Imaging

2000–2002 · Materials Science & Engineering

Conferences

2020–2021 · Technical programme chair, CIC (IS&T)

2019 · Short course chair and member of the oganising committee, CIC (IS&T)

2013–2018 · Publication chair and member of the programme committee, CVCS (IEEE)

2011– · Reviewer, ICIP (IEEE)

2009– · Reviewer, session chair (2010), SCIA (LNCS)

2013 · Member of the technical programme committee, AIC

2010–2013 · Reviewer and member of the technical committee, EUVIP

2012 · Member of the programme committee, VISAPP

2012 · Session chair and member of the programme committee, CGIV (IS&T)

2011 · Reviewer and member of the technical programme committee, IMAGAPP

2007–2010 · Session chair and general chair (2010) for the CREATE

workshops and conference

2010 · Reviewer, IWACI

2007 · Interactive Session Chair, CIC (IS&T/SID)

2007 · Session Chair, GCIS

Books

2016 · Reviewer for Ronny Kjelsberg, *Teknologi og vitenskap – Historie, metode, etikk og miljø*, Universitetsforlaget, Oslo, Norway

2010 · Reviewer for Rangaraj M. Rangayyan, Begoña Acha, and Carmen Serrano, *Color Image Processing – with Biomedical Applications*, SPIE Press, Bellingham, Washington, USA

Externally Funded Projects

2020–2024 · Project leader for ICVIO (Individual Colour Vision-based Image Optimisation) funded by the Research Council of Norway (RCN) over the IKTPLUSS programme

2019–2023 · Participating (also to the application) in the project Capsule funded by RCN over the IKTPLUSS programme

2016–2019 · Participating (also to the application) in the project IQ-MED funded by RCN over the IKTPLUSS programme

2016–2019 · Participating (also to the application) in the project MUVAPP funded by RCN over the FRINATEK/Toppforsk programme

2013–2017 · Sub-programme leader for the project *HyPerCept – Colour and Quality in Higher Dimensions*, funded by RCN over the SHP programme.

2010– · Member of CIE's Technical Committe TC 1-82/1-97, 'The Calculation of Colour Matching Functions as a Function of Age and Field Size'

2007–2013 · Member of the Quality Assurance, Evaluation and Supervision Board of the CIMET (Erasmus Mundus) International Master. With University of Saint-Etienne (France), University of Joensuu (Finland), University of Granada (Spain).

2007–2011 · Participating (also to the application) in the project *Perceptual image difference metrics – a unifying approach to image representation and reproduction*

funded by RCN over the SHP programme

2007–2010 · Member of the board of the CREATE (Marie Curie) network and also contributed to the application. With University of the West of England (UK), University of Milan (Italy), University of Veszprém (Hungary), Université de Reims Champagne-Ardenne (France), Universitat Autonoma de Barcelona (Spain), University of Leeds (UK), University of Ulster at Belfast (UK)

2007–2009 · Project leader and participant (also to the application) for the project *Measuring colour with a colour acquisition system* for Tomra ASA

2004–2007 · Participating (also to the application) in the project *Multispectral colour imaging* funded by RCN over the SHP programme

2004–2005 · Project leader and participant (also to the application) for the industry project *Colour Calibration of an Electronic Camera System for Object Recognition* for Tomra ASA

2003–2004 · Participating (also to the application) in the project *ICC3D: Interaktiv fargeomfangstilpasning, metrikker for fargeomfang og tilretteleggelse for kommersialisering* funded by Prokom

2002–2003 · Participating (also to the application) in the project *Fargestyring i produksjon og presentasjon av digital video* funded by Prokom

2001 · Participating (also to the application) in the project *Bare Illusjon? Fargestyring i produksjon og presentasjon av levende bilder* funded by Prokom

Teaching

2022– · *Programming 2* (bachelor level, three times), NTNU, lecturing, supervision, examination, grading

2020– · *Colour Imaging* (PhD level, three times), NTNU, one of several lecturers, supervision

2019–2022 · *Introduction to the Engineering Profession* (bachelor level, three times), NTNU, lecturing, supervision, examination, grading

2016–2020 · *Scientific Computing* (bachelor level, five times), NTNU, lecturing, course responsible, supervision, examination, grading

2016–2018 · *Introduction to Engineering – Computer Science* (bachelor level, three times), NTNU, lecturing, course

responsible, supervision, examination, grading

2013–2020 · *Bachelor Thesis* (bachelor level, eight times), course responsible

2014–2017 · *Computational Image Processing* (PhD level, twice), NTNU/Gjøvik University College, lecturing and course responsible, supervising seminars and grading final papers.

2014–2015 · *Introduction to Engineering* (bachelor level, twice), Gjøvik University College, lecturing and supervision, examination.

2013–2014 · *Image Processing and Analysis* (master level, twice), Gjøvik University College, responsible for the course, lecturing, supervising student exercise classes, making and grading exams.

2010–2012 · *Mathematics for Signal and Image Processing* (master level, three times), Gjøvik University College, responsible for the course, and since 2011 lecturing, supervising student exercise classes, making and grading exams.

2009 · *Variational Image Processing* (PhD level, once), Gjøvik University College, lecturing and course responsible, supervising seminars and grading final papers.

2008 · *Design and Analysis of Algorithms* (master level, once), Gjøvik University College, lecturing and responsible for the course, supervising student exercise classes, making and grading exams. Part of the CIMET programme.

2004–2009 · *Mathematics 40: Discrete Transforms* (master level, four times), Gjøvik University College, lecturing and responsible for the course, supervising student exercise classes, making and grading exams.

2004 · *Fundamental Programming* (bachelor level, once), Gjøvik University College, supervising student exercise classes.

2002–2005 · *Compilers* (bachelor level, five times), Gjøvik University College, lecturing and responsible for the course, supervising student exercise classes, making and grading exams.

2001 · *Distributed Operating Systems* (bachelor level, once), Gjøvik University College, lecturing and responsible for the course, supervising student exercise classes, making and grading exams.

2000–2002 · *Algorithms II* (bachelor level, three times), Gjøvik University College, lecturing and responsible for the

course, supervising student exercise classes, making and grading exams.

2000 · *Object Oriented Programming* (bachelor level, once), Gjøvik University College, supervising student exercise classes.

2000–2015 · Various short courses, tutorials and workshops on theoretical computer science, mathematics, LaTeX, Python, GNU/linux, ICC3D, Emacs, Git, Matlab etc., as well as guest lectures in various courses, Gjøvik University College

1992–1994 · *Fundamental Physics* (bachelor level, twice), NTH, supervising student exercise classes.

Publications

Journal Papers

Luvin M. Ragoo, Ivar Farup, and Jan Henrik Wold. Apparatus and method for measuring individual color-matching functions. *Optics Express*, 32:41127–41155.

Mathieu Nguyen, Jean-Baptiste Thomas, and Ivar Farup. Exploring imaging methods for in situ measurements of the visual appearance of snow. *Geosciences*, 14(2), 2024.

Bilal Ahmad, Pål Anders Floor, Ivar Farup, and Casper Find Andersen. Single-image-based 3d reconstruction of endoscopic images. *Journal of Imaging*, 10(82), 2024.

Petter Sagvold, Ivar Farup, and Marius Pedersen. Spatio-temporal retinex-inspired envelopes with anisotropic diffusion. *Journal of Imaging Science and Technology*, 67(6):1–18, 2023.

Giorgio Trumpy, Casper Find Andersen, Ivar Farup, and Omar Elezabi. Mapping quantitative observer metamerism of displays. *Journal of Imaging*, 9(10):227, 2023.

Casper Find Andersen, Ivar Farup, and Jon Yngve Hardeberg. Additivity constrained linearisation of camera calibration data. *IEEE Transactions on Image Processing*, 32:3774–3789, 2023.

Bilal Ahmad, Pål Anders Floor, Ivar Farup, and Øistein Hovde. 3D reconstruction of gastrointestinal regions using single-view methods. *IEEE Access*, 11:61103–61117, 2023.

Mathieu Nguyen, Jean-Baptiste Thomas, and Ivar Farup. Measuring the optical properties of highly diffuse materials. *Sensors*, 23(15), 2023.

Mathieu Nguyen, Jean-Baptiste Thomas, and Ivar Farup. Statistical analysis of sparkle in snow images. *Journal of Imaging Science and Technology*, 66(5):050401–1–050401–11, 2022.

Colin Prieur, Antoine Rabatel, Jean-Baptiste Thomas, Ivar Farup, and Jocelyn Chanussot. Machine learning approaches to automatically detect glacier snow lines on multi-spectral satellite images. *Remote Sensing*, 14(16), 2022.

Pierre-Jean Lapray, Jean-Baptiste Thomas, and Ivar Farup. Bio-inspired multimodal imaging in reduced visibility. *Frontiers in Computer Science*, 3(737144):1–11, January 2022.

Ivar Farup. Variational anisotropic gradient-domain image processing. *Journal of Imaging*, 7(10), 2021.

Guillaume Courtier, Pierre-Jean Lapray, Jean-Baptiste Thomas, and Ivar Farup. Correlations in joint spectral and polarization imaging. *Sensors*, 21(1):6, 2020.

Ivar Farup. Individualised halo-free gradient-domain colour image daltonisation. *Journal of Imaging*, 6(11):116, 2020.

Aditya Sole, Giuseppe Claudio Guarnera, Ivar Farup, and Peter Nussbaum. Measurement and rendering of complex non-diffuse and goniochromatic packaging materials. *The Visual Computer*, 2020.

Ahmed Mohammed, Ivar Farup, Marius Pedersen, Sule Yildirim, and Øistein Hovde. PS-DeVCEM: Pathology-sensitive deep learning model for video capsule endoscopy based on weakly labeled data. *Computer Vision and Image Understanding*, page 103062, August 2020.

Pål Anders Floor, Ivar Farup, Marius Pedersen, and Øystein Hovde. Error reduction through post processing for wireless capsule endoscope video. *EURASIP Journal on Image and Video Processing*, (2020:14), 2020.

Aditya Sole, Ivar Farup, Peter Nussbaum, and Shoji Tominaga. Bidirectional reflectance measurement and reflection model fitting of complex materials using an image-based measurement setup. *Journal of Imaging*, 4(136), 2018. doi:10.3390/jimaging4110136.

Jean-Baptiste Thomas and Ivar Farup. Demosaicing of periodic and random colour filter arrays by linear anisotropic diffusion. *Journal of Imaging Science and Technology*, 62(5):050401–1–050401–8, 2018.

Joschua Thomas Simon-Liedtke and Ivar Farup. Multiscale daltonization in the gradient domain. *Journal of Perceptual Imaging*, 1(1):010503–1–010503–12, 2018.

Ahmed Mohammed, Ivar Farup, Marius Pedersen, Øystein Hovde, and Sule Yildirim. Stochastic capsule endoscopy image enhancement. *Journal of Imaging*, 4(6):75, 2018.

Emmanuel Chevallier and Ivar Farup. Interpolation of the MacAdam ellipses. *SIAM Journal on Imaging Sciences*, 11(3):1979–2000, 2018.

Steven Le Moan, Ivar Farup, and Jana Blahová. Towards exploiting change blindness for natural image processing. *Journal of Visual Communication and Image Representation*, 54:31–38, 2018.

Ahmed Mohammed, Ivar Farup, Sule Yildirim, Marius Pedersen, and Øystein Hovde. Variational approach for capsule video frame interpolation. *EURASIP Journal on Image and Video Processing*, 2018(30):1–13, 2018.

Aditya Sole, Ivar Farup, Peter Nussbaum, and Shoji Tominaga. Evaluating an image-based bidirectional reflectance distribution function measurement setup. *Applied Optics*, 57(8):1918–1928, 2018.

Simen Bræck, Øyvind Grøn, and Ivar Farup. The cosmic causal mass. *Universe*, 3(2):38, 2017.

Joschua Thomas Simon-Liedtke and Ivar Farup. Using a behavioral match-to-sample method to evaluate color vision deficiency simulation methods. *J. Imaging Sci. Techn.*, 60(5):50409–1–50409–9, 2016.

Ivar Farup. A computational framework for colour metrics and colour space transforms. *PeerJ Comp. Sci.*, 2:e48, 2016.

Joschua Thomas Simon-Liedtke and Ivar Farup. Evaluating color vision deficiency daltonization methods using a behavioral visual-search method. *J. Vis. Commun. Image. R.*, 35:236–247, 2016.

Ivar Farup. Hyperbolic geometry for colour metrics. *Optics Express*, 22(10):12369–12378, 2014.

Ivar Farup. Constructing an optimal circulating temperament based on a set of musical requirements. *J. Math. Music*, 8(1):25–39, 2014.

Gabriele Simone, Giuseppe Audino, Ivar Farup, Fritz Albregtsen, and Alessandro Rizzi. Termite Retinex: A new implementation based on a colony of intelligent agents. *J. Electron. Imaging*, 23(1):013006, 2014. doi: 10.1117/1.JEI.23.1.013006.

Gabriele Simone, Marius Pedersen, Ivar Farup, and Claudio Oleari. Multi-level contrast filtering in image difference metrics. *EURASIP J. Image Video Process.*, 2013(39), 2013. doi:10.1186/1687-5281-2013-39.

Dibakar R. Pant and Ivar Farup. Geodesic calculation of color difference formulas and comparison with the Munsell color order system. *Color Res. Appl.*, 38(4):259–266, 2013.

Dibakar R. Pant and Ivar Farup. Riemannian formulation and comparison of color difference formulas. *Color Res. Appl.*, 37(6):429–440, December 2012.

Øyvind Kolås, Ivar Farup, and Alessandro Rizzi. STRESS: A framework for spatial color algorithms. *J. Imaging Sci. Tech.*, 55(4):040503, 2011.

Arne M. Bakke, Ivar Farup, and Jon Y. Hardeberg. Evaluation of algorithms for the determination of color gamut boundaries. *J. Imaging Sci. Tech.*, 54(5):050502–11, 2010.

Fabienne Dugay, Ivar Farup, and Jon Y. Hardeberg. Perceptual evaluation of color gamut mapping algorithms. *Color Res. Appl.*, 33(6):470–476, 2008.

Ivar Farup, Carlo Gatta, and Alessandro Rizzi. A multiscale framework for spatial gamut mapping. *IEEE T. Image Process.*, 16(10), 2007. doi: 10.1109/TIP.2007.904946.

Ivar Farup, Jan H. Wold, Thorstein Seim, and Torkjel Søndrol. Generating lights with specified spectral power distributions. *Appl. Optics*, 46(13):2411–2422, 2007.

Ivar Farup. Bøker på bøker – en bokorms øvelse i stabling. *Normat*, 55(1):3–7, 2007.

Hans P. Hornæs, Jan H. Wold, and Ivar Farup. Colorimetry and prime colours – a theorem. *J. Math. Biol.*, 51(2):144–156, 2005.

Jon Y. Hardeberg, Ivar Farup, and Gudmund Stjernvang. Color quality analysis of a system for digital distribution and projection of cinema commercials. *SMPTE Motion Imag. J.*, 114(4):146–151, April 2005.

Ivar Farup, Jean-Marie Drezet, and Michel Rappaz. In situ observation of hot tearing formation in succinonitrile–acetone. *Acta Mater.*, 49(7):1261–1269, 2001.

Ivar Farup and Asbjørn Mo. Two-phase modelling of mushy zone parameters associated with hot tearing. *Metall. Mater. Trans. A*, 31(5):1461–1472, 2000.

Ivar Farup and Asbjørn Mo. The effect of work hardening on thermally induced deformations in aluminium DC casting. *J. Therm. Stresses*, 23(1):47–58, 2000.

Ivar Farup, Jean-Marie Drezet, Asbjørn Mo, and Terje Iveland. Gleeble machine determination of creep law parameters for thermally induced deformations in aluminium DC casting. *J. Therm. Stresses*, 23(1):47–58, 2000.

Ivar Farup and Øyvind Grøn. Vacuum energy and inertial dragging. *Gen. Relat. Gravit.*, 28:441–449, 1996.

Conference Papers

G. D. Finlayson and I. Farup. Colour meets geometry in colorimetric filter design. In *Proceedings of IS&T's 32nd Color and Imaging Conference*, pages 1–7, 2024.

Bita Panahi, Aditya Sole, and Ivar Farup. Estimating spectral BRDF parameters using handheld devices. In *Proceedings of IS&T's 32nd Color and Imaging Conference*, pages 29–34, 2024.

Bilal Ahmad, Ivar Farup, and Pål Anders Floor. Anisotropic diffusion for depth estimation in shape from focus systems. In *Proceedings of the 19th International Joint Conference on Computer Vision, Imaging and Computer*

Graphics Theory and Applications (VISIGRAPP 2024), volume 4, pages 85–89. SCITEPRESS, 2024.

Jean-Baptiste Denis Thomas, Pierre-Jean Lapray, Max Derhak, and Ivar Farup. Standard representation space for spectral imaging. In *Color and Imaging Conference*, volume 31, pages 187–192, 2023.

Luvin Munish Ragoo and Ivar Farup. A simple and cost effective colorimeter for characterising observer variability in colour matching experiments. In *Proc. IS&T London Imaging Meeting*, 50-54, 2023.

Ronan Dumoulin, Pierre-Jean Lapray, Jean-Baptiste Thomas, and Ivar Farup. Impact of training data on LMMSE demosaicing for colour-polarization filter array. In *16th International Converence on Signal-Image Technology & Internet-Based Systems (SITIS)*, pages 275–280, 2022.

Bilal Ahmad, Pål Anders Floor, and Ivar Farup. 3D reconstruction of GI regions using shape-from-focus. In *Proc. SPIE, Fifteenth International Conference on Machine Vision (ICMV 2022)*, volume 12701, 2022.

Pål Anders Floor, Ivar Farup, and Marius Pedersen. 3D reconstruction of human colon from capsule endoscope images. In *CVCS*, volume 3271. CEUR Workshop Proceedings, 2022.

Bilal Ahmad, Pål Anders Floor, Ivar Farup, and Milan Kresović. 3D reconstruction of gastrointestinal regions from single images. In *CVCS*, volume 3271. CEUR Workshop Proceedings, 2022.

Bilal Ahmad, Pål Anders Floor, and Ivar Farup. A comparison of regularization methods for near-light-source perspective shape from shading. In *IEEE ICIP*, pages 3146–3150, 2022.

Luvin Munish Ragoo and Ivar Farup. Optimising a Euclidean colour space transform for colour order and perceptual uniformity. In *29th Color and Imaging Conference*, pages 282–287. Society for Imaging Science and Technology, 2021.

Mathieu Nguyen, Jean-Baptiste Thomas, and Ivar Farup. Investigating the Kokhanovsky snow reflectance model in close-range spectral imaging. In *29th Color and Imaging Conference*, pages 31–36. Society for Imaging Science and Technology, 2021.

Alexandra Spote, Pierre-Jean Lapray, Jean-Baptiste Thomas, and Ivar Farup. Joint demosaicing of colour and polarisation from filter arrays. In *29th Color and Imaging Conference*, pages 288–292. Society for Imaging Science and Technology, 2021.

Aldo Barba, Ivar Farup, and Marius Pedersen. An evaluation of colour-to-greyscale image conversion by linear anisotropic diffusion and manual colour grading. In *27th Color and Imaging Conference*, pages 69–74. Society for Imaging Science and Technology, 2019.

Ahmed Mohammed, Sule Yildirim, Ivar Farup, and Marius Pedersen. StreoScenNet: Surgical stereo robotic scene segmentation. In *SPIE Medical Imaging*, volume 10951, page 109510P. SPIE, San Diego, California, United States 2019.

Ahmed Mohammed, Sule Yildirim, Ivar Farup, Marius Pedersen, and Øistein Hovde. Y-Net: A deep convolutional neural network to polyp detection. In *British Machine Vision Conference*, 2018.

Ivar Farup, Marius Pedersen, and Ali Alsam. Colour-to-greyscale image conversion by linear anisotropic diffusion of perceptual colour metrics. In *Colour and Visual Computing Symposium*. IEEE, 2018.

Carlo Gatta and Ivar Farup. Gamut mapping in RGB colour spaces with the iterative ratios diffusion algorithm. In *Electronic Imaging*, volume 2017, pages 12–20. Society for Imaging Science and Technology, 2017.

Joschua Simon-Liedtke, Ivar Farup, and Reiner Eschbach. On the edge: A scalable daltonization method focusing chromatic edges and contrast. In *Electronic Imaging*, volume 2017, pages 28–35. Society for Imaging Science and Technology, 2017.

Aditya Sole, Ivar Farup, and Peter Nussbaum. Evaluating an image based multi-angle measurement setup using different reflection models. In *Electronic Imaging*, volume 2017, pages 101–107. Society for Imaging Science and Technology, 2017.

Steven Le Moan, Marius Pedersen, Ivar Farup, and Jana Blahová. The influence of short-term memory in subjective image quality assessment. In *IEEE International Conference on Image Processing*, pages 91–95. IEEE, 2016.

Marius Pedersen and Ivar Farup. Improving the robustness to image scale of the total variation of difference metric. In *Proceedings of the 3rd International Conference on Signal Processing & Integrated Netoworks (SPIN)*, pages 116–121. IEEE, 2016.

Aditya Sole, Ivar Farup, and Shoji Tominaga. Image based reflectance measurement based on camera spectral sensitivities. In *IS&T International Symposium on Electronic Imaging*, pages 360.1–360.8, 2016.

Steven Le Moan and Ivar Farup. Exploiting change blindness for image compression. In *Proceedings of the 11th International Conference on Signal-Image Technology & Internet-Based Systems*, pages 89–95. IEEE, 2015.

Joschua Simon-Liedtke and Ivar Farup. Empirical disadvantages for color-deficient people. In *Proceedings of the AIC2015 Tokyo Color and Image Conference*, pages 391–394. International Colour Association (AIC), 2015.

Phil Green, Srikrishna Nuduramati, and Ivar Farup. Variability in colour matches between displays. In *Proceedings of the AIC2015 Tokyo Color and Image Conference*, pages 137–142. International Colour Association (AIC), 2015.

Emmanuel Chevallier, Ivar Farup, and Jesus Angulo. Histograms of images valued in the manifold of colours endowed with perceptual metrics. In *Geometric Science of Information*, pages 762–769. Springer International Publishing, 2015.

Ali Alsam, Ivar Farup, and Hans Jakob Rivertz. Iterative sharpening for image contrast enhancement. In Marius Pedersen and Jean-Baptiste Thomas, editors, *Proceedings of 2015 Colour and Visual Computing Symposium (CVCS)*, pages 1–4, Gjøvik, Norway, 2015. IEEE.

Aditya Sole, Ivar Farup, and Shoji Tominaga. An image-based multi-directional reflectance measurement setup for flexible objects. In *IS&T/SPIE Electronic Imaging*, pages 93980J–93980J. International Society for Optics and Photonics, 2015.

Khai Van Ngo, Jehans J Storvik, Christopher A Dokkeberg, Ivar Farup, and Marius Pedersen. QuickEval: a web application for psychometric scaling experiments. In *IS&T/SPIE Electronic Imaging*, pages 93960O–93960O. International Society for Optics and Photonics, 2015.

Joschua T Simon-Liedtke, Ivar Farup, and Bruno Laeng. Evaluating color deficiency simulation and daltonization methods through visual search and sample-to-match: SaMSEM and ViSDEM. In *IS&T/SPIE Electronic Imaging*, pages 939513–939513. International Society for Optics and Photonics, 2015.

Joschua T Simon-Liedtke and Ivar Farup. Spatial intensity channel replacement daltonization (SIChaRDa). In *IS&T/SPIE Electronic Imaging*, pages 939516–939516. International Society for Optics and Photonics, 2015.

Aditya Sole, Ivar Farup, and Shoji Tominaga. An image based multi-angle method for estimating reflection geometries of flexible objects. In *IS&T 22nd Color Imaging Conference*, pages 91–96. IS&T, 2014.

Marius Pedersen, Xinwei Liu, and Ivar Farup. Improved simulation of image detail visibility using the non-subsampled contourlet transform. In *IS&T 21st Color Imaging Conference*, pages 191–196. IS&T, 2013.

Dibakar R. Pant, Ivar Farup, and Manuel Melgosa. Analysis of three Euclidean color-difference formulas for predicting the average RIT-DuPont

color-difference ellipsoids. In *Proceedings of AIC2013 – 12th International AIC Congress*, pages 537–540, 2013.

Marius Pedersen and Ivar Farup. Simulation of image detail visibility using contrast sensitivity functions and wavelets. In *IS&T/SID 20th Color Imaging Conference*, pages 70–75, Los Angeles, California, USA, November 2012. IS&T.

Ali Alsam and Ivar Farup. Spatial colour gamut mapping by orthogonal projection of gradients onto constant hue lines. In *8th International Symposium on Visual Computing*, pages 556–565, Rethymnon, Crete, Greece, July 2012.

Gabriele Simone, Giuseppe Audino, Ivar Farup, and Alessandro Rizzi. Termite retinex: A novel implementation based on a colony of agents. In *Proc. of the Italian Workshop on Artificial Life and Evolutionary Computation*, pages 1–11, 2012. Published on CD, isbn 978-88-903581-2-8.

Gabriele Simone and Ivar Farup. Spatio-temporal Retinex-like envelope with total variation. In *6th European Conference on Colour in Graphics, Imaging, and Vision (CGIV)*, pages 176–181, Amsterdam, The Netherlands, 2012.

Gabriele Simone, Giuseppe Audino, Ivar Farup, and Alessandro Rizzi. Termites: A Retinex implementation based on a colony of agents. In *Color Imaging XVII: Displaying, Processing, Harcopy, and Applications*, pages 82920N–82920N, 2012.

Erik Hjelmås and Ivar Farup. A common framework for scripting tutorials. In *Norsk Informatikkonferanse, NIK*, pages 219–229. Tapir Akademisk Forlag, 2011.

Marius Pedersen, Gabriele Simone, Mingming Gong, and Ivar Farup. A total variation based color image quality metric with perceptual contrast filtering. In *International conference on Pervasive Computing, Signal Processing and Applications*, Gjøvik, Norway, September 2011.

Dibakar R. Pant and Ivar Farup. CIE uniform chromaticity scale diagram for measuring performance of OSA-UCS ΔE_E and CIEDE00 formulas. In *Proceedings of EUVIP*, pages 18–23, Paris, France, July 2011.

Ali Alsam and Ivar Farup. Spatial colour gamut mapping by means of anisotropic diffusion. In *Computational Colour Imaging Workshop (CCIW)*, volume 6626 of *Lecture Notes in Computer Science*, pages 113–124, Berlin, 2011. Springer.

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