

Cordelia Schmid – Curriculum Vitae

Education

- Habilitation, Computer Science, Institut National Polytechnique de Grenoble, November 2001. Dissertation: From image matching to learning visual models.
- PhD, Computer Science, Institut National Polytechnique de Grenoble, July 1996. Dissertation: Image matching and retrieval based on local greyvalue invariants, with distinction “Mention très honorable avec félicitations”. Advisor: Roger Mohr.
- M.S., Computer Science, University of Karlsruhe, July 1992, with distinction “sehr gut”.

Awards and distinctions

- Heinrich-Hertz-Gastprofessur, Karlsruher Institut für Technologie (KIT), 2024.
- European Inventor Award 2024, category research, awarded by European Patent Office.
- Prix Monte-Carlo Femme de l’Année, 2024.
- Helmholtz award for fundamental contributions in computer vision that have withstood the test of time, 2023.
- Körber European Science Prize, 2023.
- Asia-Pacific Artificial Intelligence Association Fellow, 2022.
- PAMI Distinguished Researcher Award, 2021.
- Royal Society Milner award, 2020.
- Ellis Fellow, 2020.
- Koenderink prize for fundamental contributions in computer vision that have withstood the test of time, 2018.
- Member of the German National Academy of Sciences, Leopoldina, 2017.
- Grand Prix Inria-Académie des sciences, 2016.
- Humbolt research award, Alexander von Humbolt Foundation, Germany, 2015.
- Karen Spärck Jones lecture, annual event of the British Computer Society that honours women in computing research, 2015.
- Clarivate Analytics (former Thomson Reuters) Highly Cited Researcher, 2014, 2015, 2016 & 2017.
- Longuet-Higgins prize for fundamental contributions in computer vision that have withstood the test of time, 2006, 2014 & 2016.
- ERC advanced grant ALLEGRO, 2013.
- IEEE Fellow, 2012.
- Best paper award for the 2009 edition of the Pattern Recognition journal.
- Best poster prize, honorable mention, IEEE Conf. on Computer Vision and Pattern Recognition, 2008.
- Best paper award, honorable mention, Indian Conference on Computer Vision, Graphics and Image Processing, 2006.
- Best paper award, ISPRS Conf. on Automatic Extraction of GIS Objects from Digital Imagery, 1999.
- Best thesis award Institut National Polytechnique de Grenoble, 1997.

Challenges and competitions

- Winner of the 2022 Ego4D challenge for AV Transcription, in conjunction with ECCV 2022.
- Winner of the Epic-Kitchen Action Recognition Challenge, in conjunction with CVPR 2022.
- Winner of the REVERIE / Soon Challenge 2021, in conjunction with ICCV 2021.
- Winner of CVPR 2020 Video Pentathlon challenge.
- Winner of VOT-TIR 2015 tracking competition.
- Winner of Thumos 2014 action localization challenge.
- Winner of Thumos 2013 action classification challenge.
- Winner of TRECVID 2012 & 2013 multi-media event detection competition.
- Winner of TRECVID 2008 video copy detection competition.
- Winner of PASCAL Visual Object Classes Challenge Competitions, 2005–08, 10 & 11.

Employment

- Google research scientist, part-time 50%, 2018—.
- Research Director, Inria, second class 2004–2008, first class 2008–2015, exceptional class 2016—.
- Head of the THOTH Inria team, 2016–2018.
- Head of the LEAR Inria team, 2003–2015.
- Research Scientist, Inria, 1997–2004.
- Research Assistant, Oxford University, Robotics Research Group, 1996–1997.
- Ph.D. Fellowship, Marie Curie EU grant and Inria grant, 1993–1996.

Editorial, conference and committee activities

Editor-in-Chief: • International Journal of Computer Vision (2013–2018).

Editorial Board: • Foundations and Trends in Computer Graphics and Vision (2005—).
 • International Journal of Computer Vision (2004–2012).
 • IEEE Trans. on Pattern Analysis and Machine Intelligence (2001–2005).

General Chair: • International Conference on Computer Vision, 2023.
 • European Conference on Computer Vision, 2020.
 • IEEE Conference on Computer Vision and Pattern Recognition, 2015.

Program Chair: • European Conference on Computer, 2012.
 • IEEE Conference on Computer Vision and Pattern Recognition, 2005.

- Workshop Chair:
- Ellis Workshop for Computer Vision and Machine Learning, Modena, April 2024.
 - Ellis Workshop for Computer Vision and Machine Learning, Metzingen, May 2023.
 - Structured Representations for Video Understanding, in conjunction with ICCV 2021 workshop, virtual, October 2021.
 - Ellis Workshop for Computer Vision and Machine Learning, virtual, July 2021.
 - Ellis Workshop for Computer Vision and Machine Learning, virtual, July 2020.
 - Workshop on YouTube-8M Large-Scale Video Understanding, in conjunction with ICCV'19, Seoul, 2019.
 - Ellis Workshop for Computer Vision and Machine Learning, San Sebastian, September 2019.
 - Workshop on Artificial Intelligence, Horizon Maths, Paris, 2018.
 - Workshop on Frontiers of Video Technology, San Jose, 2017.
 - ALLEGRO Workshop on Weakly Supervised Learning and Video Recognition, Grenoble, 2014 & 2015.
 - IPAM Workshop on Large Scale Multimedia Search, Los Angeles, US, 2012.
 - CVPR'09 Workshop on Feature Detectors and Descriptors, 2009.
 - Int. Workshop on Video, Barcelona, Spain, 2009.
 - 4th Int. Workshop on Object Recognition, Como, Italy, 2008.
 - 3rd Int. Workshop on Object Recognition, Siracusa, Italy, 2006.
 - 2nd Int. Workshop on Object Recognition, Taormina, Italy, 2004.
 - 1st Int. Workshop on Object Recognition, Taormina, Italy, 2003.
- Summer School Chair:
- PRAIRIE Artificial Intelligence Summer School, Grenoble, 2018.
 - Visual Recognition and Machine Learning Summer School, Paris, 2013.
 - Visual Recognition and Machine Learning Summer School, Grenoble, 2012.
 - Visual Recognition and Machine Learning Summer School, Paris, 2011.
 - Visual Recognition and Machine Learning Summer School, Grenoble, 2010.
- Area Chair:
- IEEE International Conf. on Comp. Vision, 2003, 2005, 2009, 2013, 2015, 2017, 2019, 2021.
 - IEEE Conf. on Comp. Vision & Pattern Recog., 2000, 2004, 2007, 2010, 2013, 2022, 2023 (senior AC), 2025 (senior AC).
 - European Conference on Computer Vision, 2002, 2004, 2008, 2010, 2016, 2018, 2022, 2024 (lead AC).
 - Congrès de Reconnaissance de Formes et Intelligence Artif., 2004, 2008, 2010.
 - Asian Conference on Computer Vision, 2007.
 - Neural Information Processing Systems, 2005, 2006, 2012, 2017, 2018 (senior AC), 2019 (senior AC), 2020 (senior AC), 2021, 2024 (senior AC).
 - International Conference on Machine Learning, 2018.
 - International Conference on Learning Representations, 2023 (senior AC), 2025 (senior AC).

- Award committee:
- Milner award, 2022—.
 - CVPR 2020 best paper award.
 - Oréal-UNESCO award France for Women in Sciences 2017.
 - Young researcher award 2014 & 2015.
 - Longuet-Higgins award 2015, 2019.
 - Helmholtz award 1987–1999, 2021.
 - ECCV 2008 best paper prize.
 - NIPS 2006 best student paper.

Supervision

- 11PhD students current; 44 PhD students graduated; several with awards:
 - Longuet-Higgins award 2014 for K. Mikolajczyk
 - AFRIF PhD award 2014 for G. Cinbis
 - Longuet-Higgins award 2015 for N. Dalal
 - Longuet-Higgins award 2016 for S. Lazebnik
 - AFRIF PhD award 2019 and Ellis PhD award 2020 for G. Varol
 - ECVA Young Researcher Award 2021 for Z. Akata
 - Google PhD Fellowship and AFRIF PhD award 2024 honorable mention for A. Yang
- 1 postdocs current; 18 postdocs past.
- 13 engineers past.

Teaching

- Object recognition and computer vision, Master-2 MVA, ENS, 10 hours per year (equivalent 15hTD), 2008–2024.
- Object recognition, Master-2 Computer Science, Grenoble University, 10 hours per year (equivalent 15hTD), 2001–2004, 2007–2019.
- Image databases, 3rd year ENSIMAG, 12 hours per year, 2002–2003.
- Object oriented software development, 2nd year ENSIMAG, 40 hours per year, 2001–2003.
- Analysis of algorithms, 2nd year ENSIMAG and ESISAR, 80 hours per year, 1998–2001.

Research evaluation

- Member of Fellows Appointment Committee of the Tübingen ELLIS Institute, 2023—.
- Member of IEEE Computer Society and the Computer Vision Foundation CVPR/ICCV Steering committee, 2023—.
- Member of the Munich Center for Machine Learning (MCML) Advisory Board, 2023—.
- Member of TPAMI EIC search committee, 2021.
- Member of Technical Activities Board for International Foundation of Robotics Research, 2020—.
- Member of Scientific Advisory Committee of the Helmholtz AI Cooperation Unit, 2020—.
- Member of scientific advisory board for the German Competence Centers for AI Research, 2019—.
- Director of Ellis program on Computer Vision and Machine Learning, 2019—.
- Member of board of directors of the Computer Vision Foundation (CVF), 2016—.

- Member of a hiring committee at KTH, Stockholm, 2016.
- Member of a hiring committee at MPI Intelligent Systems, 2016.
- Member of a hiring committee at NTNU Trondheim, 2015.
- Member of the evaluation panel for ERC starting grants, 2014.
- Member of the PAMI-TC executive committee, 2014—.
- Member of the PAMI-TC awards committee, 2013—.
- Member of the “conseil d’AERES” (Agence d’évaluation de la recherche et de l’enseignement supérieur), 2007–2011.
- Member of the evaluation committee for audiovisual and multimedia projects of Agence Nationale de la Recherche (ANR), 2006 & 2007.
- Reviewer for ERC grants, European projects, VENI (Netherlands), FACR (Québec), ANR (France), ANVAR (France), Israel Science Foundation, Austrian Science Fund, Vienna Science and Technology Fund, Czech Science Foundation.
- Reviewer and examiner for 42 PhD and 14 HDR theses.

Evaluation Inria

- Member of the Inria-académie des sciences award committee, 2019 & 2020.
- Member of the “Comité scientifique”, Inria Grenoble, 2015–2019.
- Scientific organization of the Inria evaluation for theme “Vision, Perception and Multimedia Interpretation”, 2014.
- President of the Inria recruiting committee for Grenoble, 2009, 2010, 2013.
- Member of the “bureau du comité de projet”, Inria Grenoble, 2007–2011.
- Member of the “commission d’évaluation”, Inria, 2002–2011.
- Member of 17 Inria recruiting committees (12 CR and 5 DR recruiting committees), 2002–2011.
- Scientific organization of the Inria evaluation for theme “Cog B”, 2005.
- Representative for international relations at Inria Grenoble, 2005–2007.
- Member of the “commission emplois scientifiques” , Inria Grenoble, 2002–06.

Grants

- French-German ANR project with MPI Tübingen, 2021-2025.
- Prairie chair, 2019–2023 & 2024–2028.
- Research contract with Naver Labs Europe, 2017-2018.
- Intel Network on Intelligent Systems Gift, 2017 & 2018.
- Amazon Academic Research Award, 2017 & 2018.
- Adobe Gift, 2017.
- Facebook University Gift, 2015–2020.
- Google Research Award, 2015–2016.
- ERC advanced grant ALLEGRO, 2013–2019.
- Research contract with Xerox, 2011-2013, 2014–2017.
- EU integrated project AXES, 2011–2014.
- Industrial contract with MBDA on pose and object identification, 2010–2013.
- QUAERO search engine, French Grant “OSEO”, 2008–2013.
- “Géométrie algorithmique informationnelle et applications (GAIA)”, French Grant “ANR blanc”, 2007–2011. Grand prix ANR du numérique.

- Prototype for an image search engine, French Grant “GRAVIT”, 2007–2008.
- Inria associated team with CMU, UIUC and Willow/Inria, 2007–2009.
- Industrial contract with MBDA on object recognition and detection, 2007–2010.
- Cognitive-level annotation using latent statistical structure (CLASS), European Grant, 2006–2009.
- Integrating knowledge, semantics and content for user-centered intelligent media services (ace-Media), European IP Grant, 2004–2007.
- Pattern Analysis, Statistical Modeling and Computational Learning (PASCAL & PASCAL 2), “Network of Excellence”, European Grant, 2004–2012.
- Modèles visuels et statistiques pour la reconnaissance de classes d’images, French Grant “ACI masse de données”, 2003–2006.
- EADS postdoctoral grant on shape description, 2006.
- Industrial contract with MBDA on object detection and tracking, 2005–2006.
- CNRS/UIUC Grant with Professor J. Ponce, 2000-2006.
- Learning for Adaptable Visual Assistants (LAVA), EU IST Grant, 2002–2005.
- Video Browsing, Exploration and Structuring (VIBES), European Grant, FET, 2000–2004.
- Global Architecture for Indexing and Retrieval of Multimedia Documents (AGIR), French Grant, RNT, 1999–2001.
- Industrial contract with Aérospatiale on matching of aerial images and missile images, 1999–2001.
- Industrial contract with Alcatel on the development of a prototype for interactive video navigation, 1996–1998.

Transfer

- Patent. Automated video and audio annotation techniques. A. Nagrani, P. Seo, B. Seybold, A.Hauth, S. Manen, C. Sun, C. Schmid. Published 2023-08-10, WO/2023/149898A1.
- Patent. Attention Bottlenecks for Multimodal Fusion. A. Nagrani, S. Yang, A. Arnab, C. Schmid, C. Sun. GP-303150-00-US. Published 06/2023, US/2023/0177384A1.
- Patent, A. Arnab, M. Dehghani, G. Heigold, C. Sun, M. Lucic and C. Schmid. Systems and methods for improved video understanding. Published 01/2023, US/2023/0017072A1.
- Patent. Learning with Neighbor Consistency for Noisy Labels. A. Iscen, J. Valmadre, A.Arnab, C. Schmid. Published 03/2023, WO/2/023037136A1.
- Patent. Improved Two-Stage Machine Learning for Imbalanced Datasets. A. Iscen, A. Araujo, B.Gong, C. Schmid. Published 08/2022, WO/2022/177581A1.
- Patent. Agent trajectory prediction using target locations. H. Zhao, J. Gao, T. Lan, C. Sun, B. Sapp, Y. Shen, Y. Shen, Y. Chai, C. Schmid, C. Li, D.Anguelov. Published 02/2022, WO/2022/035602A2; Issue Date: 5/21/2024, Waymo Patent WAY-51584-00-US.
- Patent, C. Sun, A. Shrivastava, C. Schmid, R. Sukthankar, K. Murphy and C. Vondrick. Action localization using neural networks. Published 02/2020, WO/2020/033345A1.
- Patent, C. Schmid, S. Vijayanarasimhan, S. Ricco, B. Seybold, R. Sukthankar and K. Fragkiadaki. Determining structure and motion in images using neural networks. Published 06/2018, WO/2018/102717A1.
- Patent, V. Choutas, P. Weinzaepfel, J. Revaud and C. Schmid. System and method for training a convolutional neural network and classifying an action performed by a subject in a video using the trained convolutional neural network. Published 10/2019, US/2019/0303677. Transferred to Naver.

- Patent, Z. Akata, F. Perronin, Z. Harchaoui and C. Schmid. Label-embedding view of attribute-based recognition. Published 12/2014, US/2014/0376804A1. Transferred to Xerox.
- Patent, H. Jégou, C. Schmid and M. Douze. Assistance device for image recognition. Published 07/2011, US/2011/0164822. Licensed to MilPix.
- Co-founder and scientific advisor of the Start-Up MilPix, 2008–2013. Transfer of image search technology, including image description and large scale search software.
- Transfer of image classification software to the Start-Up WayWay, OMB Labs, 2014.
- Collaboration with Aerospatiale section of MBDA, 2004–2013: (i) In-depth report on research in object recognition, 2004; (ii) Transfer of image matching & point tracking software, 2005; (iii) PhD of H. Harzallah on vehicle recognition, 2007–2010; (iv) Innovation prize of MBDA for the PhD of H. Harzallah, 2010; (v) Research contract on object pose estimation, 2010–2013.
- Member of the scientific advisory board of IMRA-Europe, <http://www.imra-europe.com>, 2009–2013.
- Transfer of image retrieval and face recognition software to the Start-Up Adways, 2012.
- Transfer of face recognition software to the Start-Up Technosense, 2012.
- Transfer of product quantization software to Technicolor, 2011.
- Research license for image search software to Stanford University, San Diego University and California Institute of Technology, 2009.
- Transfer of image description software to KOLOR, 2009.

Dissemination & Mentoring

- Article "IA & Multimodalité : entretien avec Cordelia Schmid, spécialiste de la vision par ordinateur", ActuIA, 29/07/2024.
- Article "Cordelia Schmid, la chercheuse qui aide les ordinateurs à comprendre leur environnement", L'Usine Nouvelle, 11/07/2024.
- Article "Digitalisierung & KI: Cordelia Schmid", Eduard Müller, Tagesspiegel Background, 09/07/2024.
- Newspaper article "Prix de l'inventeur européen : cette chercheuse donne des yeux à l'intelligence artificielle", Héloïse Pons, Le Point, 13/07/2024.
- Newspaper article "Avant, l'ordinateur ne voyait rien", Célia Amphoux, Le Dauphiné libéré and Progrès, 18/06/2024.
- Sponsor (marraine) of the "Cérémonie des docteurs", Grenoble, June 2024.
- News article "Cordelia Schmid – Nominierte für den europäischen Erfinderpreis", Jasper Benink, Research.Table & Europe.Table, 26/06/2024.
- Panelist on *CVPR: past, present, and future*, CVPR'24, June 2024.
- Newspaper article "Erfinderin bringt Maschinen das Sehen bei", Thomas Magenheim, Stuttgarter Zeitung, 04/06/2024.
- Panelist on *Future of AI*, Prairie Days in partnership with France Digitale, Station F, Paris, April 2024.
- Newspaper interview mit Cordelia Schmid, "Wenn Computer das Denken lernen", I. Micheler, WELT am Sonntag, Sonderausgabe WELT-Wirtschaftsgipfel, 11/02/2024.
- Newspaper article "Cordelia Schmid, pionnière de la vision par ordinateur", J.-B. Jacquin, Le Monde, 8/11/2023.
- Mentor at the Doctoral Consortium, in conjunction with CVPR'10, CVPR'14, ICCV'15, CVPR'16, ICCV'17, CVPR'19, ICCV'21, CVPR'22, ICCV'23, CVPR'24.

- Mentor for female PhD students at the workshop “Women in Computer Vision”, in conjunction with CVPR’15, CVPR’17, CVPR’18, ECCV’18 & CVPR’19.
- Dinner speaker at the workshop “Women in Computer Vision”, in conjunction with CVPR’19.
- Participation in a round table on AI, a technology for innovation, forum 5i, Grenoble, May 2019.
- Animating several mentorship sessions at Women in Data Science Conference, Zürich, April 2019.
- Presentation at “An Evening with Google AI: Women in CV”, Sunnyvale, December 2018.
- Presentation on data for artificial intelligence at the Inria-Industry meeting, Paris, 2017.
- “Extraction d’informations à partir des images”, C. Schmid and J. Ponce. Les Big Data à Découvert. Editions du CNRS, 2017.
- Presentation on human action recognition in videos at the “Journées NeuroSTIC In’Tech 2016”, Grenoble, June 2016.
- Seminar for high school teachers on visual description and recognition, March 2013.
- “Automatic Recognition of Human Activities in Realistic Videos”, A. Gaidon, Z. Harchaoui and C. Schmid. ERCIM NEWS 95, October 2013.
- “De la reconnaissance de visages à l’interprétation de scènes complexes”, Françoise Breton and Cordelia Schmid. Article for the general public in ”20 ans Inria Grenoble”, 2012.
- Panel member and mentor at the workshop “Women in Machine Learning”, in conjunction with NIPS’11.
- Presentation on large-scale image search at “Journée d’échanges et de formation”, LERTI, Inria, Grenoble, September 2010.
- Panelist on *Future Directions of Computer Vision* at IEEE CVPR 2008.
- Presentation of LEAR’s image search demonstrator at the 2003, 2005 and 2006 “Fête de la Science”, Grenoble and at the Forum 4i, Grenoble, 2006.
- Interviewed and filmed for *Computer Vision: Fact and Fiction*, a DVD produced by UC San Diego aimed at high school students and the general public, 2005, <http://vision.ucsd.edu/cvd>.
- Presentation on image search at the INTECH seminar “recherche par le contenu de documents multi-médias”, Grenoble, 2002.
- Presentation on invariant image description at the Inria-Industry seminar, Rocquencourt, 2001.
- Demonstration of the “interactive video” software, “journées Rencontres Inria-Industrie”, 1998.
- Demonstration of the image retrieval software, CEBIT’96.

Invited presentations

Invited conference and workshop presentations

1. Invited speaker at Instance-Level Recognition Workshop, in conjunction with ECCV'24, October 2024.
2. Invited speaker at Tutorial on Video Content Understanding and Generation, in conjunction with ECCV'24, October 2024.
3. Keynote speaker at German Pattern Recognition Conference, Munich, September 2024.
4. Invited speaker at MMFM2: The 2nd Workshop on What is Next in Multimodal Foundation Models?, in conjunction with CVPR'24, June 2024.
5. Invited speaker at LPVL: Learning from Procedural Videos and Language: What is Next?, in conjunction with CVPR'24, June 2024.
6. Invited speaker at New Frontiers for Zero-Shot Image Captioning Evaluation (NICE) Workshop, in conjunction with CVPR'24, June 2024.
7. Invited speaker at Tool-Augmented Vision (TAVI) Workshop, in conjunction with CVPR'24, June 2024.
8. Invited speaker at the Ellis computer vision and machine learning workshop, April 2024.
9. Invited speaker at the Monaco Women Forum, March 2024.
10. Invited speaker at the WELT-Wirtschaftsgipfel, Berlin, January 2024.
11. Invited speaker at the 3rd NAVER LABS Europe International Workshop on AI for Robotics, Grenoble, November 2023.
12. Invited speaker at Workshop on New Ideas in Vision Transformers, in conjunction with ICCV'23, Paris, October 2023.
13. Invited speaker at Fifth Large-scale Video Object Segmentation Workshop, in conjunction with ICCV'23, Paris, October 2023.
14. Keynote speaker at Workshop "Fondements Mathématiques de l'IA", Paris, October 2023.
15. Invited speaker at Video AI Symposium, London, September 2023.
16. Presentation at Nature Webcast, September 2023.
17. Invited speaker at "T4V: Transformers for Vision" workshop, in conjunction with CVPR'23, June 2023.
18. Invited speaker at "Scholars & Big Models: How Can Academics Adapt?", in conjunction with CVPR'23, June 2023.
19. Invited speaker at Fourth International Workshop on Large Scale Holistic Video Understanding, in conjunction with CVPR'23, June 2023.
20. Invited speaker at New Frontiers for Zero-Shot Image Captioning Evaluation Workshop, in conjunction with CVPR'23, June 2023.

21. Invited speaker at Bavarian International Conference on AI, Munich, February 2023.
22. Invited speaker at Neurips 2022 Workshop on Vision Transformers: Theory and Applications, virtual, December 2022.
23. Keynote talk at TrecVid 2022, virtual, December 2022.
24. Keynote speaker at ACCV 2022, virtual, December 2022.
25. Keynote talk at the 2nd edition of the 3IA Doctoral Workshop, Grenoble, November 2022.
26. Invited speaker at the Czech-French AI Workshop, Prague, September 2022.
27. Invited speaker at the BIFOLD opening event, Berlin, September 2022.
28. Invited speaker at the Long-form Video Understanding Workshop, in conjunction with CVPR'22, virtual, June 2022.
29. Invited speaker at 5th Multimodal Learning and Applications Workshop, in conjunction with CVPR'22, virtual, June 2022.
30. Keynote speaker at ICLR 2022, virtual, April 2022.
31. Invited speaker at Prairie workshop, Paris, November 2021.
32. Keynote ACM Multimedia 2021, virtual, October 2021.
33. Invited speaker at 4th Workshop on Closing the Loop Between Vision and Language, in conjunction with ICCV'21, virtual, October 2021.
34. Invited speaker at 2nd Autonomous Vehicle Vision Workshop, in conjunction with ICCV'21, virtual, October 2021.
35. Invited speaker at Workshop on Computer Vision for the Factory Floor, in conjunction with ICCV'21, virtual, October 2021.
36. Invited speaker at Workshop on Large-Scale Holistic Video Understanding, in conjunction with CVPR'21, virtual, June 2021.
37. Invited speaker at Frontiers of Monocular 3D Perception workshop, in conjunction with CVPR'21, virtual, June 2021.
38. Invited speaker at 2nd Comprehensive Tutorial in Video Modeling, in conjunction with CVPR'21, virtual, June 2021.
39. Invited speaker at French-German Machine Learning Symposium, virtual, May 2021.
40. Turing lecture, virtual, May 2021.
41. Milner lecture, November 2020.
42. Keynote speaker at France is AI, November 2020.
43. Invited speaker at Tracking and its many Guises Workshop, in conjunction with ECCV, virtual, August 2020.
44. Invited speaker at Multi-modal Video Analysis Workshop, in conjunction with ECCV, virtual, August 2020.

45. Keynote speaker at Computer Vision and Deep Learning Summit “Machines Can See”, virtual, June 2020.
46. Keynote speaker at GdR ISIS, virtual, June 2020.
47. Keynote speaker at ICRA, virtual, June 2020.
48. Keynote speaker at Applied Machine Learning Days, Imaging Track, Lausanne, January 2020.
49. Invited speaker at BMVA symposium in Video Understanding, London, September 2019.
50. Keynote speaker at BMVC’19, Cardiff, UK, September 2019.
51. Keynote speaker at SIGIR’19, Paris, July 2019.
52. Invited speaker at Computer Vision after 5 Years, in conjunction with CVPR’19, June 2019.
53. Invited speaker at Tutorial on Unifying Human Activity Understanding, in conjunction with CVPR’19, June 2019.
54. Invited speaker at Facebook AI Video Summit, Los Angeles, June 2019.
55. Keynote speaker at AI Experts Workshop in conjunction with the AI for Good Global Summit, Geneva, May 2019.
56. Invited speaker at Women in Data Science Conference, Zürich, April 2019.
57. Invited speaker at collège de France seminar (chair of Stephane Mallat), February 2019.
58. Invited speaker at the Google Multimodal Machine Perception Workshop, San Francisco, October 2018.
59. Invited speaker at 11th Perceptual Organization in Computer Vision Workshop: Action, Perception and Organization, in conjunction with ECCV 2018, September 2018.
60. Invited speaker at “What is optical flow for?” workshop, in conjunction with ECCV 2018, September 2018.
61. Invited speaker at Third International Workshop on Video Segmentation, in conjunction with ECCV 2018.
62. Keynote speaker at Deep Learning Conference, Rennes, September 2018.
63. Keynote speaker at ActivityNet workshop, in conjunction with CVPR’18, June 2018.
64. Invited talk at CVPR Good Citizen of CVPR event, in conjunction with CVPR’18, June 2018.
65. Keynote speaker at 3D Humans workkshop, in conjunction with CVPR, June 2018.
66. Invited speaker at “Symposium sur l’IA à l’Académie des sciences”, Paris, February 2018.
67. Keynote speaker at ECML-PKDD 2017, Skopje, September 2017.
68. Keynote speaker at Gresti 2017, Juan-les-Pins, September 2017.
69. Invited speaker at Workshop on YouTube-8M Large-Scale Video Understanding, in conjunction with CVPR’17, July 2017.

70. Invited speaker at Women in Computer Vision Workshop, in conjunction with CVPR'17, July 2017.
71. Invited speaker at 1st Workshop on Target Re-Identification and Multi-Target Multi-Camera Tracking, in conjunction with CVPR'17, July 2017.
72. Invited speaker at Chalearn Looking at People Workshop, in conjunction with CVPR'17, July 2017.
73. Invited speaker at Frontiers of Video Technology, July 2017.
74. Invited speaker at Korean Conference on Computer Vision, Seoul, June 2017.
75. Keynote speaker at Swedish Symposium on Deep Learning, Stockholm, June 2017.
76. Invited speaker at Russian Summit "Machines Can See", Moscow, June 2017.
77. Invited speaker at Large-scale Computer Vision Workshop in conjunction with NIPS'16, December 2016.
78. Keynote speaker at IEEE International Conference on Image Processing, Phoenix, September 2016.
79. Invited speaker at Robust Features Workshop in conjunction with CVPR'16, June 2016.
80. Invited speaker at collège de France seminar (chair of Yann LeCun), Mars 2016.
81. Invited speaker at the LIG (laboratoire d'informatique de Grenoble) keynote talks, February 2016.
82. Invited speaker at the Scenes from Video Workshop, Santa Cruz, Chile, December 2015.
83. Invited speaker at the Google Deep Video Workshop, Santa Cruz, USA, November 2015.
84. Invited speaker at the Human Robot Interaction Workshop at UC Berkeley, November 2015.
85. Invited speaker at workshop on pose recovery, action recognition, and cultural event recognition, in conjunction with CVPR'15, June 2015.
86. Invited speaker at the ERC Workshop on Research Data Management and Sharing, September 2014.
87. Keynote speaker at Annual Workshop of the Austrian Association for Pattern Recognition, IST Austria, May 2014.
88. Keynote speaker at Netherlands Conference on Computer Vision, April 2014.
89. Invited speaker at First French-German Mathematical Image Analysis Conference, Paris, January 2014.
90. Keynote talk at The First International Workshop on Action Recognition with a Large Number of Classes, in conjunction with ICCV '13, Sydney, Australia, December 2013.
91. ICCV area chair meeting workshop, Oxford University, August 2013.
92. Keynote speaker at 14th International Workshop on Image and Audio Analysis for Multimedia Interactive Services (WIAMIS), Paris, July 2013.

93. Invited speaker at Second international workshop on visual analysis and geo-localization of large-scale imagery in conjunction with CVPR'13, June 2013.
94. CVPR area chair meeting workshop, USC, February 2013.
95. Keynote speaker at GdR ISIS, Le Touquet, November 2012.
96. First international workshop on visual analysis and geo-localization of large-scale imagery in conjunction with ECCV'12, Florence, October 2012.
97. Keynote speaker at the International Symposium on Visual Computing, Crete, July 2012.
98. Keynote speaker at ACM International Conference on Multimedia Retrieval (ICMR), Hong Kong, June 2012.
99. Workshop on Large Scale Multimedia Search, Los Angeles, January 2012.
100. NIPS satellite WiML Workshop, Granada, December 2011.
101. Symposium on Applied Perception in Graphics and Visualization, Toulouse, August 2011.
102. Frontiers in Computer Vision Workshop, MIT, August 2011.
103. Keynote speaker at Compression et représentation des signaux audiovisuels (Coresa 2010), Lyon, October 2010.
104. Oxford vision workshop, July 2010.
105. ECCV area chair colloquium, Paris, June 2010.
106. CVPR area chair meeting workshop, University of Maryland, February 2010.
107. International Workshop on Recent Trends in Computer Vision, Kyoto, Japan, June 2009.
108. International Workshop on Video, Barcelona, Spain, May 2009.
109. Keynote speaker at the Conference on Machine Vision Applications, Yokohama, Japan, May 2009.
110. Keynote speaker at BMVC'08, Leeds, UK, September 2008.
111. ECCV area chair symposium, Paris, June 2008.
112. International Workshop on Computer Vision, Venice, Italy, May 2008.
113. 4th International Workshop on Object Categorization, in conjunction with ICCV'07, Rio de Janeiro, Brazil, October 2007.
114. MIRU International Workshop on Computer Vision, Hiroshima, Japan, July 2007.
115. 2nd Beyond Patches Workshop in conjunction with CVPR'07, June 2007.
116. Annual Workshop of the Austrian Association for Pattern Recognition (OEAGM'07), Schloss Krumbach, Austria, May 2007.
117. CVPR area chair meeting workshop, Pittsburgh, USA, March 2007.
118. LIAMA's 10th Anniversary Workshop, Beijing, China, January 2007.
119. International Workshop on Object Recognition, Syracuse, Italy, September 2006.

120. TAIMA 2005, Hammamet, Tunisia, September 2005.
121. Empirical Inference Symposium, Tuebingen, August 2005.
122. ICCV Area Chair Meeting Workshop, Leuven, June 2005.
123. MSRI workshop on Visual Recognition, Berkeley, USA, March 2005.
124. CVPR area chair meeting workshop, Los Angeles, February 2005.
125. International Workshop on Object Recognition, Taormina, Sicily, Italy, October 2004.
126. PASCAL Workshop on Pattern Recognition and Machine Learning, Grenoble, May 2004.
127. Cognitive Computer Vision Colloquium, Prague, January 2004.
128. International Workshop on Object Recognition, Taormina, Sicily, Italy, September 2003.
129. Workshop on Computational Vision, Rosenon, Sweden, July 2003.
130. The Learning Workshop, Snowbird, Utah, April 2003.
131. The 4th Sino-Franco Workshop on Web Technologies, Taipei, Taiwan, March 2003.
132. Workshop at the area chair meeting, Lund, February 2002.
133. Dagstuhl-Seminar on Content-Based Image and Video Retrieval, Dagstuhl, January 2002.
134. Inria statistics seminar, Rennes, November 2001.
135. GDR-GT10 Indexation Multimedia, Paris, France, May 2001.
136. The Learning Workshop, Snowbird, Utah, April 2001.
137. Beckman Institute vision workshop, Urbana-Champaign, February 2000.

Tutorials and courses

1. Course at Pairie artificial intelligence summer school (PAISS), virtual, July 2021.
2. Course at APAC Graduate Symposium, virtual, March 2021.
3. Course on action recognition at Pairie artificial intelligence summer school (PAISS), Paris, October 2019.
4. Course on action recognition at the Data Science Summer School, Paris, June 2019.
5. Course on action recognition at PRAIRIE Artificial Intelligence Summer School, Grenoble, July 2018.
6. Tutorial on action recognition at the Winter School in Computer Vision, Jerusalem, January 2017.
7. Course on action recognition at Computational Vision Summer School, Freudenstadt, Germany, July 2015.
8. Tutorial on image search and classification at the Inria Visual Recognition and Machine Learning Summer School, Paris, July 2013.

9. Tutorial on visual recognition for a group of high-school teachers, INRIA Grenoble, March 2013.
10. Tutorial on modern features at ECCV 2012, Florence, October 2012.
11. Tutorial on image search and classification at the Inria Visual Recognition and Machine Learning Summer School, Grenoble, July 2012.
12. Tutorial on image search and classification at the ENS-Inria Visual Recognition and Machine Learning Summer School, Paris, July 2011.
13. Lecture on local features and large scale search at the 3e cycle romand d'informatique, Geneva, Switzerland, February 2011.
14. Tutorial on image features, search and classification at the Winter Research School at ENS Lyon, January 2011.
15. Tutorial on image search and classification at the Inria Visual Recognition and Machine Learning Summer School, Grenoble, July 2010.
16. Tutorial on images features and object recognition, Lotus Hill Summer School on Computer Vision, Ezhou, China, July 2008.
17. Tutorial on local features and recognition, International Summer School on Computer Vision, Acitrezza, Sicily, Italy, July 2007.
18. Tutorial on invariant local features, AERFAI Summer School on Action and Object Classification Techniques in Digital Images, Granada, Spain, June 2006.
19. Course on local descriptor and recognition, MIT, Boston, USA, December 2005.
20. Course on local features and recognition, Oulu University, May 2005.
21. Short-course on local features, IEEE Conference on Computer Vision and Pattern Recognition, June 2003.
22. Tutorial on recognition and image retrieval, Summer School Vision and Robotics, Toulouse, July 2002.
23. Tutorial on recognition and image retrieval, Summer School Vision and Robotics, Grenoble, July 2000.

Invited presentations at universities and companies

1. Presentation at Helmholtz Centrum München, Munich, July 2024.
2. Presentation at TUM, Garching, Munich, July 2024.
3. Presentation at Prairie scientific workshop, Paris, April 2024.
4. Presentation at Google retreat, Grenoble, March 2024.
5. ONE MUNICH Distinguished Lecture on AI & Robotics, Munich, January 2024.
6. Talk at YouTube Machine Learning summit, Google, virtual, December 2023.
7. Invited talk at the MPI Summer Colloquium, Tübingen, July 2023.

8. Seminar at Ellis workshop, May 2023.
9. Invited speaker at soirée networking Prairie, January 2023.
10. Seminar at MPI Tübingen, October 2022.
11. Presentation at the Stanford University HAI Spring Conference, virtual, April 2022.
12. Talk at the inaugural Multipod Summit, Google, virtual, June 2021.
13. Talk at Academie des technologies, virtual, March 2021.
14. Talk at EPFL Center of Intelligent Systems - CIS Colloquium, virtual, March 2021.
15. Talk at inaugural Bell Labs webinar on Prairie research, December 2020.
16. Talk at Google Research All Hands, virtual, August 2020.
17. Talk at Inria/EPFL workshop, Grenoble, January 2020.
18. Talk at Google EMEA research days, Zurich, December 2019.
19. Talk at Workshop on AI for Robotics, Naver, Grenoble, November 2019.
20. Talk at Google Research EMEA meeting, virtual, November 2019.
21. Talk at Workshop - Robotics: a Challenge for the Artificial Intelligence, Toulouse, October 2019.
22. Presentation at Prairie inauguration, Paris, October 2019.
23. Seminar at DeepMind, London, September 2019.
24. Seminar at Intel Network on Intelligent Systems, Munich, September 2019.
25. Seminar at Ellis workshop, September 2019.
26. Seminar at MPI Tübingen, July 2019.
27. Seminar at WILLOW/SIERRA retreat, Marseille, June 2019.
28. Seminar at Google MTV, April 2019.
29. Seminar at ETH Zürich, March 2019.
30. Presentation at “Prairie/industry meeting”, Paris, December 2018.
31. Presentation at Google workshop on 3D Deep Learning, October 2018.
32. Seminar for AI residents, Google MTV, June 2018.
33. Seminar at MPI Tübingen, April 2018.
34. Seminar at Google Zürich, April 2018.
35. Seminar at Google Mountain View, March 2018.
36. Seminar at Google Paris, March 2018.
37. Seminar at Leopoldina ”section meeting”, Ulm, February 2018.

38. Seminar at Intel Network on Intelligent Systems, Munich, August 2017.
39. Seminar at Berkeley University, July 2017.
40. Seminar at Toyota Research Institute, July 2017.
41. Seminar at Google, Mountain View, July 2017.
42. Seminar at DeepMind, London, June 2017.
43. Speaker at Distinguished Seminar Series in Computing, Imperial College, London, June 2017.
44. Seminar at MPI, Tübingen, May 2017.
45. Seminar at “10 ans de l’ERC à Inria”, Paris, Mars 2017.
46. Seminar at Google, Mountain View, July 2016.
47. Seminar at “Journées scientifiques Inria”, June 2016.
48. Seminar at Karlsruhe Technology Institute, June 2016.
49. Seminar at MPI, Tübingen, April 2016.
50. Seminar at INSA Lyon, April 2016.
51. Seminar at New York University, January 2016.
52. Seminar at Berkeley University, November 2015.
53. Seminar at Stanford University, June 2015.
54. Seminar at Google, Mountain View, June 2015.
55. Seminar at Facebook AI Research lab, New York, May 2015.
56. Seminar at CMU, Pittsburgh, May 2015.
57. Seminar at Oxford University, March 2015.
58. Seminar at Gatsby Computational Neuroscience Unit, London, March 2015.
59. Seminar at MPI, Tübingen, February 2015.
60. Seminar at Univ. Edinburgh, July 2014.
61. Seminar at MPI, Tübingen, April 2014.
62. Seminar at WILLOW retreat, Bandol, June 2013.
63. Seminar at UCF, Orlando, May 2013.
64. Seminar at MPI, Tübingen, January 2013.
65. Seminar at University of Berkeley, December 2012.
66. Seminar at New York University, May 2012.
67. Seminar at Google, Zürich, May 2012.
68. Seminar at ETHZ, Zürich, May 2012.

69. Seminar at MSR Cambridge, April 2012.
70. Seminar at MPI, Tübingen, April 2012.
71. Colloquium J. Morgenstern, Sophia-Antipolis, December 2011.
72. Seminar at New York University, July 2010.
73. Seminar at Centre de Mathématiques et de Leurs Applications, Ecole Normale Supérieure de Cachan, Paris, April 2010.
74. Seminar at CMU, Pittsburgh, September 2009.
75. Seminar at University of Texas at Austin, April 2009.
76. Seminar at Oxford University, March 2009.
77. Seminar at UCL, London, March 2009.
78. Seminar at ETHZ, Zürich, February 2009.
79. Seminar at Max Planck Institut Saarbrücken, Germany, September 2008.
80. Seminar at TU München, Germany, July 2008.
81. Seminar at LIAMA, Beijing, China, July 2008.
82. Seminar at the Advanced Computer Vision Company, Vienna, Austria, May 2007.
83. Seminar at ENS Ulm, Paris, France, October 2006.
84. Seminar at Carnegie Mellon University, Pittsburgh, August 2006.
85. Seminar at Microsoft Research, Seattle, August 2006.
86. Seminar at Xerox, Grenoble, June 2006.
87. Seminar at ETH Zurich, April 2006.
88. Seminar at UIUC, Champaign, February 2006.
89. Seminar at ENS Ulm, Paris, France, October 2005.
90. Seminar at University of Liege, Belgium, February 2005.
91. Seminar at University of Illinois, Urbana-Champaign, January 2005.
92. Seminar at Max Planck Institut Tuebingen, Germany, December 2004.
93. Vision Seminar at Berkeley University, April 2004.
94. Presentation at Toyota, Tokyo, Japan, May 2003.
95. Vision Seminar at University of Illinois, Urbana-Champaign, October 2002.
96. Vision Seminar at University of Illinois, Urbana-Champaign, October 2001.
97. Vision Seminar at Berkeley University, USA, January 2000.
98. Microsoft Research Labs, Redmond, Washington, March 1999.

Publications

The two main journals of computer vision are the International Journal on Computer Vision (IJCV) and the IEEE Transactions on Pattern Analysis and Machine Intelligence (PAMI) with acceptance rates below 30%. The three main conferences are the IEEE International Conference on Computer Vision (ICCV), the IEEE Conference on Computer Vision and Pattern Recognition (CVPR) and the European Conference on Computer Vision (ECCV). These three conferences are very selective—in general less than 25% of the articles submitted are accepted—and their proceedings play a role which is as important as international journals.

According to Google Scholar my h-index is 155 and the total number of citations for my publications is more than 150 000.

Journal articles

1. L. Ventura, A. Yang, C. Schmid and G. Varol. CoVR-2: Automatic Data Construction for Composed Video Retrieval. *IEEE Transactions on Pattern Analysis and Machine Intelligence*. To appear.
2. L. Ventura, C. Schmid and G. Varol. Learning text-to-video retrieval from image captioning. *International Journal of Computer Vision*. To appear.
3. Q. Le Lidec, W. Jallet, L. Montaut, I. Laptev, C. Schmid and J. Carpentier. Contact models in robotics: A comparative analysis. *IEEE Transactions on Robotics*. To appear.
4. Q. Le Lidec, F. Schramm, L. Montaut, C. Schmid, I. Laptev and J. Carpentier. Leveraging randomized smoothing for optimal control of nonsmooth dynamical systems. *Nonlinear Analysis: Hybrid Systems*, Volume 52, May 2024.
5. P. Bideau, E. Learned-Miller, C. Schmid and K. Alahari. The right spin: Learning object motion from rotation-compensated flow fields. *International Journal of Computer Vision*, volume 132, 40-55, 2024.
6. A. Yang, A. Miech, J. Sivic, I. Laptev and C. Schmid. Learning to answer visual questions from web videos. *IEEE Transactions on Pattern Analysis and Machine Intelligence*. To appear.
7. Q. Le Lidec, I. Kalevatykh, I. Laptev, C. Schmid and J. Carpentier. Differentiable simulation for physical system identification. *IEEE Robotics and Automation Letters*, 6(2): 3413-3420, 2021.
8. G. Varol, I. Laptev, C. Schmid and A. Zisserman. Synthetic humans for action recognition from unseen viewpoints. *International Journal of Computer Vision*, 129 (7): 2264–2287, 2021.
9. N. Dvornik, J. Mairal and C. Schmid. On the importance of visual context for data augmentation in scene understanding. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 43 (6): 2014-2028, 2021.
10. G. Rogez, P. Weinzaepfel and C. Schmid. LCR-Net++: Multi-person 2D and 3D pose detection in natural images. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 42(5):1146-1161, 2020.
11. P. Tokmakov, C. Schmid and K. Alahari. Learning to segment moving objects. *International Journal of Computer Vision*, 127(3):282-301, 2019.

12. G. Rogez and C. Schmid. Image-based synthesis for deep 3D human pose estimation. *International Journal of Computer Vision*, 126(9):993-1008, 2018.
13. N. Chesneau, K. Alahari and C. Schmid. Learning from web videos for event classification. *IEEE Transactions on Circuits and Systems for Video Technology*, 28(10):3019-3029, 2018.
14. B. Ham, M. Cho, C. Schmid and J. Ponce. Proposal flow: Semantic correspondences from object proposals. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 40(7):1711-1725, 2018.
15. G. Varol, I. Laptev, C. Schmid. Long-term convolutions for action recognition. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 40(6):1510-1517, 2018.
16. M. Paulin, J. Mairal, M. Douze, Z. Harchaoui, F. Perronnin and C. Schmid. Convolutional patch representations for image retrieval: an unsupervised approach. *International Journal of Computer Vision*, 121(1):149-168, 2017.
17. G. Sharma, F. Jurie and C. Schmid. Expanded parts model for semantic description of humans in still images. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 39(1):87-101, 2017.
18. G. Cinbis, J. Verbeek and C. Schmid. Weakly supervised object localization with multi-fold multiple instance learning. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 39(1):189-203, 2017.
19. J. Revaud, P. Weinzaepfel, Z. Harchaoui and C. Schmid. DeepMatching: Hierarchical deformable dense matching. *International Journal of Computer Vision*, 120(1):300-323, 2016.
20. V. Kalogeiton, V. Ferrari and C. Schmid. Analysing domain shift factors between videos and images for object detection. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 38(11):2327-2334, 2016.
21. M. Douze, J. Revaud, J. Verbeek, H. Jegou, C. Schmid. Circulant temporal encoding for video retrieval and temporal alignment. *International Journal of Computer Vision*, 119(3):291-306, 2016.
22. Z. Akata, F. Perronnin, Z. Harchaoui and C. Schmid. Label-embedding for image classification. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 38(7):1425-1438, 2016.
23. G. Cinbis, J. Verbeek and C. Schmid. Approximate Fisher kernels of non-iid image models for image categorization. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 38(6):1084-1098, 2016.
24. H. Wang, D. Oneata, J. Verbeek and C. Schmid. A robust and efficient video representation for action recognition. *International Journal of Computer Vision*, 119(3):219-238, 2016.
25. A. Gaidon, Z. Harchaoui and C. Schmid. Activity representation with motion hierarchies. *International Journal of Computer Vision*, 107(3):219-238, 2014.
26. Z. Akata, F. Perronnin, Z. Harchaoui and C. Schmid. Good practice in large-scale learning for image classification. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 36(3):507-520, 2014.
27. H. Wang, A. Kläser, C. Schmid and C.-L. Liu. Dense trajectories and motion boundary descriptors for action recognition. *International Journal of Computer Vision*, 103(1):60-79, 2013.

28. A. Gaidon, Z. Harchaoui and C. Schmid. Temporal localization of actions with actoms. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 35(11):2782-2795, 2013.
29. A. Prest, V. Ferrari and C. Schmid. Explicit modeling of human-object interactions in realistic videos. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 35(4):835-848, 2013.
30. A. Prest, C. Schmid and V. Ferrari. Weakly supervised learning of interactions between humans and objects. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 34(3):601-614, 2012.
31. H. Jegou, F. Perronnin, M. Douze, J. Sanchez, P. Perez and C. Schmid. Aggregating local image descriptors into compact codes. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 34(9):1704 - 1716, 2012.
32. M. Guillaumin, T. Mensink, J. Verbeek, C. Schmid. Face recognition from caption-based supervision. *International Journal of Computer Vision*, 96 (1):64-82, 2012.
33. M. Marszalek and C. Schmid. Accurate Object Recognition with Shape Masks. *International Journal of Computer Vision*, 97(2):191-209, 2012.
34. H. Jegou, M. Douze and C. Schmid. Product quantization for nearest neighbor search. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 33(1):117–128, 2011.
35. H. Jegou, M. Douze and C. Schmid. Improving bag-of-features for large scale image search. *International Journal of Computer Vision*, 87(3):316–336, 2010.
36. M. Douze, H. Jegou and C. Schmid. An image-based approach to video copy detection with spatiotemporal post-filtering. *IEEE Transactions on Multimedia*, 12(4):257–266, 2010.
37. V. Ferrari, F. Jurie and C. Schmid. From images to shape models for object detection. *International Journal of Computer Vision*, 87(3):284–303, 2010.
38. H. Jegou, C. Schmid, H. Harzallah and J. Verbeek. Accurate image search using the contextual dissimilarity measure. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 32(1):2-11, 2010.
39. M. Heikkila, M. Pietikainen and C. Schmid. Description of interest regions with local binary patterns. *Pattern Recognition*, 42(3):425-436, 2009.
40. J. van de Weijer, C. Schmid, J. Verbeek and D. Larlus. Learning color names for real world applications. *IEEE Transactions on Image Processing*, 18(7):1512-1523, 2009.
41. P. Carbonetto, G. Dorko, C. Schmid, H. Kueck and N. de Freitas. Learning to recognize objects with little supervision. *International Journal of Computer Vision*, 77(1):219-238, 2008.
42. V. Ferrari, L. Fevrier, F. Jurie and C. Schmid. Groups of adjacent contour segments for object detection. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 30(1):36-51, 2008.
43. C. Bouveyron, S. Girard and C. Schmid. High-dimensional data clustering. *Computational Statistics and Data Analysis*, 52(1):502-519, 2007.
44. J. Zhang, M. Marszalek, S. Lazebnik and C. Schmid. Local features and kernels for classification of texture and object categories: a comprehensive study. *International Journal of Computer Vision*, 73(2):213-238, 2007.

45. F. Rothganger, S. Lazebnik, C. Schmid and J. Ponce. Segmenting, modeling and matching video clips containing multiple moving objects. In *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 29(3):477–491, 2007.
46. C. Bouveyron, S. Girard and C. Schmid. High-dimensional discriminant analysis. *Communications in Statistics: Theory and Methods*, vol. 36(14):2607–2623, 2007.
47. F. Rothganger, S. Lazebnik, C. Schmid, and J. Ponce. Object modeling and recognition using local affine-invariant image descriptors and multi-view spatial constraints. *International Journal of Computer Vision*, 66(3):231-260, 2006.
48. K. Mikolajczyk, T. Tuytelaars, C. Schmid, A. Zisserman, J. Matas, F. Schaffalitzky, T. Kadir and L. Van Gool. A comparison of affine region detectors. *International Journal of Computer Vision*, 65(1/2):43–72, 2005.
49. S. Lazebnik, C. Schmid and J. Ponce. A sparse texture representation using local affine regions. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 27(8):1265-1278, 2005.
50. K. Mikolajczyk and C. Schmid. A performance evaluation of local descriptors. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 27(10):1615–1630, 2005.
51. K. Mikolajczyk and C. Schmid. Scale & affine invariant interest point detectors. *International Journal of Computer Vision*, 60(1):63–86, 2004.
52. Y. Dufournaud, C. Schmid and R. Horaud. Image matching with scale adjustment. *Computer Vision and Image Understanding*, 93(2):175-194, 2004.
53. C. Schmid. Weakly supervised learning of visual models and its application to content-based retrieval. *International Journal of Computer Vision*, 56(1):7–16, 2004.
54. R. Choudhury, C. Schmid and K. Mikolajczyk. Face detection and tracking in a video by propagating detection probabilities. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 25(10):1215-1228, 2003.
55. C. Schmid and A. Zisserman. The geometry and matching of lines and curves over multiple views. *International Journal of Computer Vision*, 40(3):199-234, 2000.
56. C. Schmid, R. Mohr and C. Bauckhage. Evaluation of interest point detectors. *International Journal of Computer Vision*, 37(2):151-172, 2000.
57. C. Schmid and R. Mohr. Local greyvalue invariants for image retrieval. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, 19(5):530-534, 1997.
58. C. Schmid and R. Mohr. Mise en correspondance par invariants locaux. *Traitement du Signal*, 13(6):591-606, 1996.
59. J. Crowley, P. Bobet and C. Schmid. Auto-calibration by direct observation of objects. *Journal of Image and Vision Computing*, 11(2):67–81, 1993.

Edited books

1. J. Ponce, M. Hebert, C. Schmid, and A. Zisserman (editors). Towards Category-Level Object Recognition. Springer Verlag, LNCS 4170, 2006.

Book chapters

1. W. Yang, T. Lyons, H. Ni, C. Schmid and L. Jin. Developing the Path Signature Methodology and Its Application to Landmark-Based Human Action Recognition. In *Stochastic Analysis, Filtering, and Stochastic Optimization*, G. Yin and T. Zariphopoulou, Springer, 2022.
2. R. Benavente, J. Van De Weijer, M. Vanrell, C. Schmid, R. Baldrich, J. Verbeek, D. Larlus. Color Names. In *Color in Computer Vision*, T. Gevers, A. Gijsenij, J. van de Weijer, J.-M. Geusebroek, Wiley, chapter 17, 2012.
3. J. Van De Weijer, T. Gevers, C. Schmid and A. Gijsenij. Color Ratios. In *Color in Computer Vision*, T. Gevers, A. Gijsenij, J. van de Weijer, J.-M. Geusebroek, Wiley, chapter 5, 2012.
4. H. Jegou, M. Douze and C. Schmid. Recent advances in image search. In *Emerging Trends and Challenges in Visual Computing*, F. Nielsen editor, LNCS, vol. 5416, pp. 305-326, 2009.
5. S. Lazebnik, C. Schmid and J. Ponce. Spatial pyramid matching. In *Object Categorization: Computer and Human Vision Perspectives*, S. Dickinson, A. Leonardis, B. Schiele, and M. Tarr editors, Cambridge University Press, chapter 21, pp. 401-415, 2009.
6. J. Ponce, T. Berg, M. Everingham, D. Forsyth, M. Hebert, S. Lazebnik, M. Marszalek, C. Schmid, B. Russell, A. Torralba, C. Williams, J. Zhang, and A. Zisserman. Dataset issues in object recognition. In *Toward Category-Level Object Recognition*, LNCS 4170, pp. 29-48, Springer Verlag, 2006.
7. S. Lazebnik, C. Schmid and J. Ponce. A discriminative framework for texture and object recognition using local image features. In *Toward Category-Level Object Recognition*, LNCS 4170, pp. 423-442, Springer Verlag, 2006.
8. F. Rothganger, S. Lazebnik, C. Schmid and J. Ponce. 3D object modeling and recognition from photographs and image sequences. In *Toward Category-Level Object Recognition*, LNCS 4170, pp. 105-126, Springer Verlag, 2006.
9. P. Carbonetto, G. Dorko, C. Schmid, H. Kueck and N. de Freitas. A semi-supervised learning approach to object recognition with spatial integration of local features and segmentation cues. In *Toward Category-Level Object Recognition*, LNCS 4170, pp. 277-300, Springer Verlag, 2006.
10. M. Everingham, A. Zisserman, C. Williams, L. Van Gool, M. Allan, C. Bishop, O. Chapelle, N. Dalal, T. Deselaers, G. Dorkó, S. Duffner, J. Eichhorn, J. Farquhar, M. Fritz, C. Garcia, T. Griffiths, F. Jurie, T. Keysers, M. Koskela, J. Laaksonen, D. Larlus, B. Leibe, H. Meng, H. Ney, B. Schiele, **C. Schmid**, E. Seeman, J. Shawe-Taylor, A. Storkey, S. Szedmak, B. Triggs, I. Ulusoy, V. Viitaniemi and J. Zhang. The 2005 PASCAL Visual Object Classes Challenge. In *Selected Proceedings of the first PASCAL Challenges Workshop*, F. d'Alche-Buc, I. Dagan and J. Quinonero editors, LNAI 3944, pp. 117-176, Springer Verlag, 2006.
11. C. Bouveyron, S. Girard and C. Schmid. Class-specific subspace discriminant analysis for high-dimensional data. In *Subspace, Latent Structure and Feature Selection*, LNCS 3940, pp. 139-150, Springer-Verlag, 2006.
12. C. Schmid, G. Dorko, S. Lazebnik, K. Mikolajczyk and J. Ponce. Pattern recognition with local invariant features. In *Handbook of Pattern Recognition and Computer Vision*, 3rd edition, C.H. Chen and P.S.P Wang editors, World Scientific, 2005.

13. P. Gros and C. Schmid. La reconnaissance des formes dans les images. In *Perception visuelle par imagerie vidéo*, M. Dhome editor, Hermes Science, Lavoisier, 2003.
14. C. Schmid, A. Zisserman and R. Mohr. Combining geometric and photometric information. In *Shape, Contour and Grouping in Computer Vision*, D. Forsyth, J. Mundy, V. di Gesù and R. Cipolla editors, Springer, 1998.
15. C. Schmid, P. Bobet, B. Lamiroy and R. Mohr. An image oriented CAD approach. In *Object Representations in Computer Vision*, J. Ponce, A. Zisserman and M. Hebert editors, Springer, 1996.

Refereed international conferences

1. M. Caron, A. Fathi, C. Schmid and A. Iscen. Web-Scale Visual Entity Recognition: An LLM-Driven Data Approach. In *Advances in Neural Information Processing Systems*, 2024.
2. R. Cadei, L. Lindorfer, S. Cremer, C. Schmid and F. Locatello. Smoke and Mirrors in Causal Downstream Tasks. In *Advances in Neural Information Processing Systems*, 2024.
3. J. M. Kim, J. Bader, S. Alaniz, C. Schmid and Z. Akata. DataDream: Few-shot Guided Dataset Generation. In *European Conference on Computer Vision*, 2024.
4. Z. Hu, A. Iscen, A. Jain, T. Kipf, Y. Yue, D. Ross, C. Schmid and A. Fathi. SceneCraft: An LLM Agent for Synthesizing 3D Scene as Blender Code. In *International Conference on Machine Learning*, 2024.
5. A. Gritsenko, X. Xiong, J. Djolonga, M. Dehghani, C. Sun, M. Lucic, C. Schmid and A. Arnab. End-to-End Spatio-Temporal Action Localisation with Video Transformers. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2024.
6. M. Caron, A. Iscen, A. Fathi and C. Schmid. A Generative Approach for Wikipedia-Scale Visual Entity Recognition. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2024.
7. J. Min, S. Buch, A. Nagrani, M. Cho and C. Schmid. MoReVQA: Exploring Modular Reasoning Models for Video Question Answering. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2024.
8. O.-B. Mercea, A. Gritsenko, C. Schmid and A. Arnab. Time-, Memory- and Parameter-Efficient Visual Adaptation. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2024.
9. J. Xu, X. Zhou, S. Yan, X. Gu, A. Arnab, C. Sun, X. Wang and C. Schmid. Pixel Aligned Language Models. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2024.
10. X. Zhou, A. Arnab, S. Buch, S. Yan, A. Myers, X. Xiong, A. Nagrani and C. Schmid. Streaming dense video captioning. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2024.
11. G. Le Moing, J. Ponce and C. Schmid. Dense Optical Tracking: Connecting the Dots. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2024.
12. S. Chen, R. Garcia Pinel, I. Laptev and C. Schmid. SUGAR: Pre-training 3D Visual Representation for Robotics In *IEEE Conference on Computer Vision and Pattern Recognition*, 2024.

13. M. Kim, P. Hongsuck Seo, Cordelia Schmid, Minsu Cho. Learning Correlation Structures for Vision Transformers. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2024.
14. A. Iscen, M. Caron, A. Fathi and C. Schmid. Retrieval-augmented Vision-Language Representation for Fine-grained Recognition Download. In *International Conference on Representation Learning*, 2024.
15. L. Ventura, A. Yang, C. Schmid and G. Varol. COVR: Learning composed video retrieval from web video captions. In *Annual AAAI Conference on Artificial Intelligence*, 2024.
16. S. K. Dwivedi, C. Schmid, H. Yi, M. Black and D. Tzionas. POCO: 3D Pose and Shape Estimation with Confidence. In *International Conference on 3D Vision*, 2024.
17. C. Sun, C. Luo, X. Zhou, A. Arnab and C. Schmid. Does Visual Pretraining Help End-to-End Reasoning? In *Advances in Neural Information Processing Systems*, 2023.
18. Z. Hu, A. Iscen, C. Sun, K.-W. Chang, Y. Sun, D. Ross, C. Schmid and A. Fathi. AVIS: Autonomous Visual Information Seeking with Large Language Model Agent. In *Advances in Neural Information Processing Systems*, 2023.
19. A. Yang, A. Nagrani, I. Laptev, J. Sivic and C. Schmid. VidChapters-7M: Video Chapters at Scale. In *Advances in Neural Information Processing Systems, Datasets and Benchmarks Track*, 2023.
20. S. Chen, R. Garcia, C. Schmid and I. Laptev. PolarNet: 3D Point Clouds for Language-Guided Robotic Manipulation. In *Conference on Robot Learning*, 2023.
21. G. Le Moing, J. Ponce and C. Schmid. WALDO: Future Video Synthesis using Object Layer Decomposition and Parametric Flow Prediction. In *International Conference on Computer Vision*, 2023.
22. K. Roth, J.-M. Kim, A. S. Koepke, O. Vinyals, C. Schmid and Z. Akata. Waffling around for Performance: Visual Classification with Random Words and Broad Concepts. In *International Conference on Computer Vision*, 2023.
23. X. Xiong, S. Yan, A. Nagrani, A. Arnab, Z. Wang, W. Ge, D. Ross and C. Schmid. UnLoc: A Unified Framework for Video Localization Tasks. In *International Conference on Computer Vision*, 2023.
24. L. Momeni, M. Caron, A. Nagrani, A. Zisserman and C. Schmid. Verbs in Action: Improving verb understanding in video-language models. In *International Conference on Computer Vision*, 2023.
25. M.-I. Georgescu, E. Fonseca, R. T. Ionescu, M. Lucic, C. Schmid and A. Arnab. Audiovisual Masked Autoencoders In *International Conference on Computer Vision*, 2023.
26. S. Chen, T. Chabal, I. Laptev and C. Schmid. Object Goal Navigation with Recursive Implicit Maps. In *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, 2023.
27. R. Garcia, R. Strudel, S. Chen, E. Arlaud, I. Laptev and C. Schmid. Robust visual sim-to-real transfer for robotic manipulation. In *IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)*, 2023.

28. M. Futeral, C. Schmid, I. Laptev, B. Sagot and R. Bawden. Tackling Ambiguity with Images: Improved Multimodal Machine Translation and Contrastive Evaluation. In *Annual Meeting of the Association for Computational Linguistics (ACL)*, 2023.
29. S. Subramanian, M. Narasimhan, K. Khangaonkar, K. Yang, A. Nagrani, C. Schmid, A. Zeng, T. Darrell and D. Klein. Modular Visual Question Answering via Code Generation. In *Annual Meeting of the Association for Computational Linguistics (ACL)*, 2023.
30. A. Yang, A. Nagrani, P.H. Seo, A. Miech, J. Pont-Tuset, I. Laptev, J. Sivic and C. Schmid. Vid2Seq: Large-Scale Pretraining of a Visual Language Model for Dense Video Captioning. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2023.
31. X. Zhou, A. Arnab, C. Sun and C. Schmid. How can objects help action recognition? In *IEEE Conference on Computer Vision and Pattern Recognition*, 2023.
32. Z. Chen, S. Chen, C. Schmid and I. Laptev. gSDF: Geometry-Driven Signed Distance Functions for 3D Hand-Object Reconstruction. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2023.
33. Z. Hu, A. Iscen, C. Sun, Z. Wang, K.-W. Chang, Y. Sun, C. Schmid, D. Ross and A. Fathi. REVEAL: Retrieval-Augmented Visual-Language Pre-Training with Multi-Source Multimodal Knowledge Memory. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2023.
34. A. Iscen, A. Fathi and C. Schmid. Improving Image Recognition by Retrieving from Web-Scale Image-Text Data. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2023.
35. P. H. Seo, A. Nagrani and C. Schmid. AVFormer: Injecting Vision into Frozen Speech Models for Zero-Shot AV-ASR. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2023.
36. Y. Kim, J. M. Kim, J. Jeong, C. Schmid, Z. Akata and J. Lee. Bridging the Gap between Model Explanations in Partially Annotated Multi-label Classification. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2023.
37. Q. Le Lidec, W. Jallet, I. Laptev, C. Schmid and J. Carpentier. Enforcing the Consensus between Trajectory Optimization and Policy Learning for Precise Robot Control. In *IEEE International Conference on Robotics and Automation*, 2023.
38. M. Alakuijala, G. Dulac-Arnold, J. Mairal, J. Ponce and C. Schmid. Learning Reward Functions for Robotic Manipulation by Observing Humans. In *IEEE International Conference on Robotics and Automation*, 2023.
39. E. Chane-Sane, C. Schmid and I. Laptev. Learning Video-Conditioned Policies for Unseen Manipulation Tasks. In *IEEE International Conference on Robotics and Automation*, 2023.
40. A. Yang, A. Miech, J. Sivic, I. Laptev and C. Schmid. Zero-Shot Video Question Answering via Frozen Bidirectional Language Models. In *Advances in Neural Information Processing Systems*, 2022.
41. S. Chen, P.-L. Guhur, M. Tapaswi, C. Schmid and I. Laptev. Learning from Unlabeled 3D Environments for Vision-and-Language Navigation. In *Advances in Neural Information Processing Systems*, 2022.

42. P.-L. Guhur, S. Chen, R. Garcia, M. Tapaswi, I. Laptev and C. Schmid. Instruction-Driven History-Aware Policies for Robotic Manipulations. In *Conference on Robot Learning*, 2022.
43. A. Nagrani, P.H. Seo, B.Seybold, A. Hauth, S. Manen, C. Sun and C. Schmid. Audio-Video Modalities from Image Captions. In *European Conference on Computer Vision*, 2022.
44. M. Narasimhan, A. Nagrani, C. Sun, M. Rubinstein, T. Darrell, A. Rohrbach and C. Schmid. TL;DW? Summarizing Instructional Videos with Task Relevance & Cross-Modal Saliency. In *European Conference on Computer Vision*, 2022.
45. Z. Chen, Y. Hasson, C. Schmid and I. Laptev. AlignSDF: Pose-Aligned Signed Distance Fields for Hand-Object Reconstruction. In *European Conference on Computer Vision*, 2022.
46. S. Chen, P.-L. Guhur, M. Tapaswi, C. Schmid and I. Laptev. Learning from Unlabeled 3D Environments for Vision-and-Language Navigation. In *European Conference on Computer Vision*, 2022.
47. T. Chabal, R. Strudel, E. Arlaud, J. Ponce and C. Schmid. Assembly Planning from Observations under Physical Constraints. In *IEEE/RSJ International Conference on Intelligent Robots and Systems*, 2022.
48. V. Gabeur, P. H. Seo, A.Nagrani, C. Sun, K. Alahari and C. Schmid. AVATAR: Unconstrained Audiovisual Speech Recognition. In *Interspeech*, 2022.
49. A. Yang, A. Miech, J. Sivic, I. Laptev and C. Schmid. TubeDETR: Spatio-Temporal Video Grounding with Transformers. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2022.
50. S. Chen, P.-L.Guhur, M. Tapaswi, C. Schmid and I. Laptev. Think Global, Act Local: Dual-scale Graph Transformer for Vision-and-Language Navigation. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2022.
51. P.H. Seo, A. Nagrani, A. Arnab and C. Schmid. End-to-end Generative Pretraining for Multimodal Video Captioning. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2022.
52. S. Yan, X. Xiong, A. Arnab, Z. Lu, M.Zhang, C. Sun and C. Schmid. Multiview Transformers for Video Recognition. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2022.
53. A. Iscen, J. Valmadre, A. Arnab and C. Schmid. Learning with Neighbor Consistency for Noisy Labels. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2022.
54. A. Nagrani, A. Arnab, A. Jansen, C. Schmid and C. Sun. Attention Bottlenecks for Multimodal Fusion. In *Advances in Neural Information Processing Systems*, 2021.
55. H. Vo, E. Sizikova, C. Schmid, P. Perez, J. Ponce. Large-Scale Unsupervised Object Discovery. In *Advances in Neural Information Processing Systems*, 2021.
56. S. Chen. P.-L.Guhur, C. Schmid and I. Laptev. History Aware Multimodal Transformer for Vision-and-Language Navigation. In *Advances in Neural Information Processing Systems*, 2021.
57. G. Le Moing, J. Ponce and C.Schmid. CCVS: Context-aware Controllable Video Synthesis. In *Advances in Neural Information Processing Systems*, 2021.

58. Q. Le Lidec, I. Laptev, C. Schmid and J. Carpentier. Differentiable rendering with perturbed optimizers. In *Advances in Neural Information Processing Systems*, 2021.
59. Y. Hasson, G. Varol, C. Schmid and I. Laptev. Towards unconstrained joint hand-object reconstruction from RGB videos. In *International Conference on 3D Vision*, 2021.
60. A. Yang, A. Miech, J. Sivic, I. Laptev and C. Schmid. Just Ask: Learning to Answer Questions from Millions of Narrated Videos. In *International Conference on Computer Vision*, 2021.
61. R. Strudel, R. Garcia, I. Laptev and C. Schmid. Segmenter: Transformer for Semantic Segmentation. In *International Conference on Computer Vision*, 2021.
62. T. Saikia, C. Schmid and T. Brox. Improving robustness against common corruptions with frequency biased models. In *International Conference on Computer Vision*, 2021.
63. PL. Guhur, S. Chen, M. Tapaswi, I. Laptev and C. Schmid. Airbert: In-domain Pretraining for Vision-and-Language Navigation. In *International Conference on Computer Vision*, 2021.
64. C. Sun, A.Nagrani, Y. Tian and C. Schmid. Composable Augmentation Encoding for Video Representation Learning. In *International Conference on Computer Vision*, 2021.
65. A. Pashevich, C. Schmid and C. Sun. Episodic Transformer for Vision-and-Language Navigation. In *International Conference on Computer Vision*, 2021.
66. A. Arnab, C. Sun and C. Schmid. Unified Graph Structured Models for Video Understanding. In *International Conference on Computer Vision*, 2021.
67. D. Epstein, J. Wu, C. Schmid and C. Sun. Learning Temporal Dynamics from Cycles in Narrated Video. In *International Conference on Computer Vision*, 2021.
68. A. Arnab, M. Dehghani, G. Heigold, C. Sun, M. Lucic and C. Schmid. ViViT: A Video Vision Transformer. In *International Conference on Computer Vision*, 2021.
69. PH. Seo, A. Nagrani and C. Schmid. Look before you speak: visually contextualized utterances. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2021.
70. L. Mi, H. Zhao, C. Nash, X. Jin, J. Gao, C. Sun, C. Schmid, N. Shavit, Y. Chai and D. Anguelov. HDMapGen: A Hierarchical Graph Generative Model of High Definition Maps. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2021.
71. E. Chane-Sane, C. Schmid and I. Laptev. Goal-Conditioned Reinforcement Learning with Imagined Subgoals. In *International Conference on Machine Learning*, 2021.
72. R. Strudel, R. Garcia, J. Carpentier, J.-P. Laumond, I. Laptev and C. Schmid. Learning obstacle representations for neural motion planning. In *Conference on Robot Learning*, 2020.
73. H. Zhao, J. Gao, T. Lan, C. Sun, B. Sapp, B. Varadarajan, Y. Shen, Y. Shen, Y. Chai, C. Schmid, C. Li and D. Anguelov. TNT: Trajet-driveN Trajectory prediction. In *Conference on Robot Learning*, 2020.
74. Y. Tian, C. Sun, B. Poole, D. Krishnan, C. Schmid and P. Isola. What makes for good views for contrastive representation learning? In *Advances in Neural Information Processing Systems*, 2020.
75. N. Dvornik, C. Schmid and J. Mairal. Selecting relevant features from a multi-domain representation for few-shot classification. In *European Conference on Computer Vision*, 2020.

76. V. Gabeur, C. Sun, K. Alahari and C. Schmid. Multi-modal transformer for video retrieval. In *European Conference on Computer Vision*, 2020.
77. A. Arnab, C. Sun, A. Nagrani and C. Schmid. Uncertainty-aware weakly supervised action detection from untrimmed videos. In *European Conference on Computer Vision*, 2020.
78. Y. Chen, L. Van Gool, C. Schmid and C. Sminchisescu. Consistency guided scene flow estimation. In *European Conference on Computer Vision*, 2020.
79. A. Dave, T. Khurana, P. Tokmakov, C. Schmid and D. Ramanan. TAO: A large-scale benchmark for tracking any object. In *European Conference on Computer Vision*, 2020.
80. A. Iscen, J. Zhang, S. Lazebnik and C. Schmid. Memory-efficient incremental learning through feature adaptation. In *European Conference on Computer Vision*, 2020.
81. A. Iscen, G. Toliás, Y. Avrithis, O. Chum and C. Schmid. Graph convolutional networks for learning with few clean and many noisy labels In *European Conference on Computer Vision*, 2020.
82. A. Pashevich, I. Kalevatykh, I. Laptev and C. Schmid. Learning visual policies for building 3D shape categories. In *IEEE/RSJ International Conference on Intelligent Robots and Systems*, 2020.
83. A. Sablayrolles, M. Douze, C. Schmid and H. Jégou. Radioactive data: tracing through training. In *International Conference on Machine Learning*, 2020.
84. Y. Hasson, B. Tekin, F. Bogo, I. Laptev, M. Pollefeys and C. Schmid. Joint hand-object reconstruction with weak flow reconstruction. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2020.
85. A. Nagrani, C. Sun, D. Ross, R. Sukthankar, C. Schmid and A. Zisserman. Speech2Action: Cross-modal supervision for action recognition. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2020.
86. J. Gao, C. Sun, H. Zhao, Y. Shen, D. Anguelov, C. Li and C. Schmid. VectorNet: Encoding vectorized road context and agent dynamics for behavior prediction. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2020.
87. J. Roth, S. Chaudhuri, O. Klejch, R. Marvin, A. Gallagher, L. Kaver, S. Ramaswamy, A. Stopczynski, C. Schmid, Z. Xi and C. Pantofaru. AVA-ActiveSpeaker: An audio-visual dataset for active speaker detection. In *IEEE International Conference on Acoustics, Speech, and Signal Processing*, 2020.
88. R. Strudel, A. Pashevich, I. Kalevatykh, I. Laptev, J. Sivic and C. Schmid. Learning to combine primitive skills: A step towards versatile robotic manipulation. In *IEEE International Conference on Robotics and Automation*, 2020.
89. T. Lucas, K. Shmelkov, K. Alahari, C. Schmid and J. Verbeek. Adversarial training of partially invertible variational autoencoders. In *Advances in Neural Information Processing Systems*, 2019.
90. C. Sun, A. Myers, C. Vondrick, K. Murphy and C. Schmid. VideoBERT: A joint model for video and language representation learning. In *International Conference on Computer Vision*, 2019.

91. Y. Chen, C. Schmid and C. Sminchisescu. Self-supervised learning with geometric constraints in monocular video: Connecting flow, depth, and camera. In *International Conference on Computer Vision*, 2019.
92. N. Dvornik, C. Schmid and J. Mairal. Diversity with cooperation: Ensemble methods for few-shot classification. In *International Conference on Computer Vision*, 2019.
93. J. Peyre, I. Laptev, C. Schmid and J. Sivic. Detecting unseen visual relations using analogies. In *International Conference on Computer Vision*, 2019.
94. V. Gabeur, J.-S. Franco, X. Martin, C. Schmid and G. Rogez. Moulding humans: Non-parametric 3D human shape estimation from single images. In *International Conference on Computer Vision*, 2019.
95. A. Pashevich, R. Strudel, I. Kalevatykh, I. Laptev and C. Schmid. Learning to augment synthetic images for sim2real policy transfer. In *IEEE/RSJ International Conference on Intelligent Robots and Systems*, 2019.
96. A. Sablayrolles, M. Douze, C. Schmid, Y. Ollivier and H. Jegou. White-box vs black-box: Bayes optimal strategies for membership inference. In *International Conference on Machine Learning*, 2019.
97. C. Sun, A. Shrivastava, C. Vondrick, R. Sukthankar, K. Murphy and C. Schmid. Relational action forecasting. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2019.
98. Y. Hasson, G. Varol, D. Tzionas, I. Kalevatykh, M. Black, I. Laptev and C. Schmid. Learning joint reconstruction of hands and manipulated objects. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2019.
99. N. Crasto, P. Weinzaepfel, K. Alahari and C. Schmid. MARS: Motion-augmented RGB stream for action recognition. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2019.
100. Y. Zhang, P. Tokmakov, M. Hebert and C. Schmid. A structured model for action detection. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2019.
101. A. Sablayrolles, M. Douze, C. Schmid and H. Jegou. Spreading vectors for similarity search. In *International Conference on Learning Representations*, 2019.
102. G. Cheron, J.-B. Alayrac, I. Laptev and C. Schmid. A flexible model for training action localization with varying levels of supervision. In *Advances in Neural Information Processing Systems*, 2018.
103. D. Wynen, C. Schmid and J. Mairal. Unsupervised learning of artistic styles with archetypal style analysis. In *Advances in Neural Information Processing Systems*, 2018.
104. C. Sun, A. Shrivastava, C. Vondrick, K. Murphy, R. Sukthankar and C. Schmid. Actor-centric relation network. In *European Conference on Computer Vision*, 2018.
105. G. Varol, D. Ceylan, B. Russell, J. Yang, E. Yumer, I. Laptev and C. Schmid. BodyNet: Volumetric inference of 3D human body shapes. In *European Conference on Computer Vision*, 2018.
106. K. Shmelkov, C. Schmid and K. Alahari. How good is my GAN? In *European Conference on Computer Vision*, 2018.

107. N. Dvornik, J. Mairal and C. Schmid. Modeling visual context is key to augmenting object detection datasets. In *European Conference on Computer Vision*, 2018.
108. F. Castro, M. Marn-Jimenez, N. Guil, C. Schmid and K. Alahari. End-to-end incremental learning. In *European Conference on Computer Vision*, 2018.
109. C. Gu, C. Sun, D. Ross, C. Vondrick, C. Pantofaru, Y. Li, S. Vijayanarasimhan, G. Toderici, S. Ricco, R. Sukthankar, C. Schmid and J. Malik. AVA: A video dataset of spatio-temporally localized atomic visual actions. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2018.
110. G. Sigurdsson, A. Gupta, C. Schmid, A. Farhadi and K. Alahari. Actor and observer: Joint modeling of first and third-person videos. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2018.
111. V. Choutas, P. Weinzaepfel, J. Revaud and C. Schmid. PoTion: Pose MoTion representation for action recognition In *IEEE Conference on Computer Vision and Pattern Recognition*, 2018.
112. V. Kalogeiton, P. Weinzaepfel, V. Ferrari and C. Schmid. Action tubelet detector for spatio-temporal action localization. In *International Conference on Computer Vision*, 2017.
113. V. Kalogeiton, P. Weinzaepfel, V. Ferrari and C. Schmid. Joint learning of object and action detectors. In *International Conference on Computer Vision*, 2017.
114. M. Pedersoli, T. Lucas, C. Schmid and J. Verbeek. Areas of attention for image captioning. In *International Conference on Computer Vision*, 2017.
115. J. Peyre, I. Laptev, C. Schmid and J. Sivic. Weakly-supervised learning of visual relations. In *International Conference on Computer Vision*, 2017.
116. K. Han, R. Rezende, B. Ham, K.-Y. Wong, M. Cho, C. Schmid and J. Ponce. SCNet: Learning semantic correspondence. In *International Conference on Computer Vision*, 2017.
117. K. Shmelkov, C. Schmid and K. Alahari. Incremental learning of object detectors without catastrophic forgetting. In *International Conference on Computer Vision*, 2017.
118. P. Tokmakov, K. Alahari and C. Schmid. Learning video object segmentation with visual memory. In *International Conference on Computer Vision*, 2017.
119. N. Dvornik, K. Shmelkov, J. Mairal and C. Schmid. BlitzNet: A real-time deep network for scene understanding. In *International Conference on Computer Vision*, 2017.
120. P. Tokmakov, K. Alahari and C. Schmid. Learning motion patterns in videos. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2017.
121. G. Varol, J. Romero, X. Martin, N. Mahmood, M. Black, I. Laptev and C. Schmid. Learning from synthetic humans. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2017.
122. G. Rogez, P. Weinzaepfel and C. Schmid. LCR-Net: Localization-Classification-Regression for human pose. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2017.
123. G. Rogez and C. Schmid. MoCap-guided data augmentation for 3D pose estimation in the wild. In *Advances in Neural Information Processing Systems*, 2016.

124. P. Tokmakov, K. Alahari, C. Schmid. Weakly-supervised semantic segmentation using motion cues. In *European Conference on Computer Vision*, 2016.
125. X. Peng and C. Schmid. Multi-region two-stream R-CNN for action detection. In *European Conference on Computer Vision*, 2016.
126. B. Ham, M. Cho, C. Schmid and J. Ponce. Proposal Flow. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2016.
127. G. Cheron, I. Laptev and C. Schmid. P-CNN: Pose-based CNN features for action recognition. In *International Conference on Computer Vision*, 2015.
128. P. Weinzaepfel, Z. Harchaoui and C. Schmid. Learning to track for spatio-temporal action localization. In *International Conference on Computer Vision*, 2015.
129. Y. Hua, K. Alahari and C. Schmid. Online object tracking with proposal selection. In *International Conference on Computer Vision*, 2015.
130. M. Paulin, M. Douze, Z. Harchaoui, J. Mairal, F. Perronnin and C. Schmid. Local convolutional features with unsupervised training for image retrieval. In *International Conference on Computer Vision*, 2015.
131. P. Bojanowski, R. Lajugie, E. Grave, F. Bach, I. Laptev, J. Ponce and C. Schmid. Weakly-supervised alignment of video with text. In *International Conference on Computer Vision*, 2015.
132. S. Kwak, M. Cho, I. Laptev, J. Ponce and C. Schmid. Unsupervised object discovery and tracking in video collections. In *International Conference on Computer Vision*, 2015.
133. J. Revaud, P. Weinzaepfel, Z. Harchaoui and C. Schmid. EpicFlow: Edge-preserving interpolation of correspondences for optical flow. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2015.
134. M. Cho, S. Kwak, C. Schmid and J. Ponce. Unsupervised object discovery and localization in the wild: Part-based matching with bottom-up region proposals. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2015.
135. P. Weinzaepfel, J. Revaud, Z. Harchaoui and C. Schmid. Learning to Detect Motion Boundaries. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2015.
136. J. Mairal, P. Koniusz, Z. Harchaoui and C. Schmid. Convolutional kernel networks. In *Advances in Neural Information Processing Systems*, 2014.
137. P. Bojanowski, R. Lajugie, F. Bach, I. Laptev, J. Ponce, C. Schmid and J. Sivic. Weakly supervised action labeling in videos under ordering constraints. In *European Conference on Computer Vision*, 2014.
138. D. Potapov, M. Douze, Z. Harchaoui and C. Schmid. Category-specific video summarization. In *European Conference on Computer Vision*, 2014.
139. Y. Hua, K. Alahari and C. Schmid. Occlusion and motion reasoning for long-term tracking. In *European Conference on Computer Vision*, 2014.
140. D. Oneata, J. Revaud, J. Verbeek and C. Schmid. Spatio-temporal object detection proposals. In *European Conference on Computer Vision*, 2014.

141. D. Oneata, J. Verbeek and C. Schmid. Efficient action localization with approximately normalized Fisher vectors. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2014.
142. A. Cherian, J. Mairal, K. Alahari and C. Schmid. Mixing body-part sequences for human pose estimation. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2014.
143. G. Cinbis, J. Verbeek and C. Schmid. Multi-fold MIL training for weakly supervised object localization. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2014.
144. M. Paulin, J. Revaud, Z. Harchaoui, F. Perronnin and C. Schmid. Transformation pursuit for image classification. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2014.
145. H. Wang and C. Schmid. Action recognition with improved trajectories. In *International Conference on Computer Vision*, 2013.
146. D. Oneata, J. Verbeek and C. Schmid. Action and event recognition with Fisher vectors on a compact feature set. In *International Conference on Computer Vision*, 2013.
147. G. Cinbis, J. Verbeek and C. Schmid. Segmentation driven object detection with Fisher vectors. In *International Conference on Computer Vision*, 2013.
148. S. Zuffi, J. Romero, C. Schmid, M. Black. Estimating human pose with flowing puppets. In *International Conference on Computer Vision*, 2013.
149. H. Jhuang, J. Gall, S. Zuffi, C. Schmid, M. Black. Towards understanding action recognition. In *International Conference on Computer Vision*, 2013.
150. P. Weinzaepfel, J. Revaud, Z. Harchaoui and C. Schmid. DeepFlow: Large displacement optical flow with deep matching. In *International Conference on Computer Vision*, 2013.
151. P. Bojanowski, F. Bach, I. Laptev, J. Ponce, C. Schmid and J. Sivic. Finding actors and actions in movies. In *International Conference on Computer Vision*, 2013.
152. M. Douze, J. Revaud, C. Schmid and H. Jegou. Stable hyper-pooling and query expansion for event detection. In *International Conference on Computer Vision*, 2013.
153. J. Revaud, M. Douze, C. Schmid, H. Jegou. Event retrieval in large video collections with circulant temporal encoding. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2013.
154. Z. Akata, F. Perronnin, Z. Harchaoui and C. Schmid. Label-embedding for attribute-based classification. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2013.
155. G. Sharma, F. Jurie and C. Schmid. Expanded parts model for human attribute and action recognition in still images. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2013.
156. J. Revaud, M. Douze and C. Schmid. Correlation-based burstiness for logo retrieval. In *ACM International Conference on Multimedia*, 2012.
157. F. Perronnin, Z. Akata and Z. Harchaoui and C. Schmid. Towards good practice in large-scale learning for image classification. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2012.

158. A. Prest, C. Leistner, J. Civera, C. Schmid and V. Ferrari. Learning object class detectors from weakly annotated video. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2012.
159. G. Cinbis, J. Verbeek, C. Schmid. Image categorization using Fisher kernels of non-iid image models. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2012.
160. G. Sharma, F. Jurie and C. Schmid. Discriminative spatial saliency for image classification. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2012.
161. R. Cinbis, J. Verbeek and C. Schmid. Unsupervised metric learning for face identification in TV Video. In *International Conference on Computer Vision*, 2011.
162. H. Wang, A. Kläser, C. Schmid and L. Cheng-Lin. Action recognition by dense trajectories. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2011.
163. A. Gaidon, Z. Harchaoui and C. Schmid. Actom sequence models for efficient action detection. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2011.
164. M. Douze, A. Ramisa and C. Schmid. Combining attributes and Fisher vectors for efficient image retrieval. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2011.
165. M. Guillaumin and J. Verbeek and C. Schmid. Multiple instance metric learning from automatically labeled bags of faces. In *European Conference on Computer Vision*, 2010.
166. M. Douze, H. Jegou, C. Schmid and P. Perez. Compact video description with precise temporal alignment. In *European Conference on Computer Vision*, 2010.
167. J. Liebelt and C. Schmid. Multi-view object class detection with a 3D geometric model. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2010.
168. M. Guillaumin, J. Verbeek and C. Schmid. Multimodal semi-supervised learning for image classification. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2010.
169. H. Jegou, M. Douze, C. Schmid and P. Perez. Aggregating local descriptors into a compact image representation. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2010.
170. M. Guillaumin, T. Mensink, J. Verbeek and C. Schmid. TagProp: Discriminative metric learning in nearest neighbor models for image auto-annotation. In *International Conference on Computer Vision*, 2009.
171. M. Guillaumin, J. Verbeek and C. Schmid. Is that you? Metric learning approaches for face identification. In *International Conference on Computer Vision*, 2009.
172. H. Harzallah, F. Jurie and C. Schmid. Combining efficient object localization and image classification. In *International Conference on Computer Vision*, 2009.
173. H. Jegou, M Douze and C. Schmid. Packing bag-of-features. In *International Conference on Computer Vision*, 2009.
174. M. Douze, H. Jegou, H. Sandhawalia, L. Amsaleg and C. Schmid. Evaluation of GIST descriptors for web-scale image search. In *ACM International Conference on Image and Video Retrieval*, 2009.
175. H. Jegou, M. Douze and C. Schmid. On the burstiness of visual elements. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2009.

176. T. Jiang, F. Jurie and C. Schmid. Learning shape prior models for object matching. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2009.
177. M. Marszałek, I. Laptev and C. Schmid. Actions in context. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2009.
178. H. Jegou, M. Douze and C. Schmid. Hamming embedding and weak geometric consistency for large scale image search. In *European Conference on Computer Vision*, 2008.
179. M. Marszalek and C. Schmid. Constructing category hierarchies for visual recognition. In *European Conference on Computer Vision*, 2008.
180. C. Pantofaru, C. Schmid and M. Hebert. Object recognition by integrating multiple image segmentations. In *European Conference on Computer Vision*, 2008.
181. I. Laptev, M. Marszalek, C. Schmid and B. Rozenfeld. Learning realistic human actions from movies. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2008.
182. M. Guillaumin, T. Mensink, J. Verbeek and C. Schmid. Automatic face naming with caption-based supervision. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2008.
183. J. Liebelt, C. Schmid and K. Schertler. Viewpoint-independent object class detection using 3D feature maps. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2008. **Best poster award, honorable mention.**
184. H. Jegou, L. Amsaleg, C. Schmid and Patrick Gros. Query-adaptative locality sensitive hashing. In *IEEE International Conference on Acoustics, Speech, and Signal Processing*, 2008.
185. T. Tuytelaars and C. Schmid. Vector quantizing feature space with a regular lattice. In *IEEE International Conference on Computer Vision*, 2007.
186. J. van de Weijer, C. Schmid and J.J. Verbeek. Using high-level visual information for color constancy. In *IEEE International Conference on Computer Vision*, 2007.
187. H. Jegou, H. Harzallah and C. Schmid. A contextual dissimilarity measure for accurate and efficient image search. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2007.
188. V. Ferrari, F. Jurie and C. Schmid. Accurate object detection with deformable shape models learnt from images. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2007.
189. M. Marszalek and C. Schmid. Accurate object localization with shape masks. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2007.
190. A. Kushal, C. Schmid and J. Ponce. Flexible object models for category-level 3D object recognition. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2007.
191. J. van de Weijer, C. Schmid and J. Verbeek. Learning color names from real-world images. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2007.
192. M. Marszalek and C. Schmid. Semantic hierarchies for visual object recognition. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2007.
193. J. van de Weijer and C. Schmid. Applying color names to image description. In *IEEE International Conference on Image Processing*, 2007.

194. M. Marszalek and C. Schmid. Spatial weighting for bag-of-features. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2006.
195. S. Lazebnik, C. Schmid and J. Ponce. Beyond bags of features: spatial pyramid matching for recognizing natural scene categories. In *IEEE Conference on Computer Vision and Pattern Recognition*, 2006.
196. J. van de Weijer and C. Schmid. Blur robust and color constant image description. In *IEEE International Conference on Image Processing*, 2006.
197. J. van de Weijer and C. Schmid. Coloring local feature extraction. In *European Conference on Computer Vision*, vol. 2, pages 334–348, 2006.
198. G. Dorko and C. Schmid. Maximally stable local description for scale selection. In *European Conference on Computer Vision*, 2006.
199. N. Dalal, B. Triggs and C. Schmid. Human detection using oriented histograms of flow and appearance. In *European Conference on Computer Vision*, 2006.
200. C. Bouveyron, S. Girard and C. Schmid. High dimensional data clustering. In *17th International Conference on Computational Statistics*, pages 812–820, 2006.
201. S. Lazebnik, C. Schmid and J. Ponce. A maximum entropy framework for part-based texture and object recognition. In *IEEE International Conference on Computer Vision*, 2005.
202. C. Bouveyron, S. Girard and C. Schmid. High dimensional discriminant analysis. In *International Symposium on Applied Stochastic Models and Data Analysis*, 2005.
203. J. Blanchet, F. Forbes and C. Schmid. Markov random fields for recognizing textures modeled by feature vectors. In *International Symposium on Applied Stochastic Models and Data Analysis*, 2005.
204. F. Jurie and C. Schmid. Scale-invariant shape features for recognition of object categories. In *IEEE Conference on Computer Vision and Pattern Recognition*, vol. 2, pages 90-96, 2004.
205. F. Rothganger, S. Lazebnik, C. Schmid and J. Ponce. Segmenting, modeling and matching video clips containing multiple moving objects. In *IEEE Conference on Computer Vision and Pattern Recognition*, vol. 2, pages 914-921, 2004.
206. K. Mikolajczk, C. Schmid and A. Zisserman. Human detection based on a probabilistic assembly of robust part detectors. In *European Conference on Computer Vision*, vol. 1, pages 69-82, 2004.
207. G. Dorko and C. Schmid. Selection of scale-invariant parts for object class recognition. In *International Conference on Computer Vision*, vol. 1, pages 634-640, 2003.
208. S. Lazebnik, C. Schmid and J. Ponce. Affine-invariant local descriptors and neighborhood statistics for texture recognition. In *IEEE International Conference on Computer Vision*, vol. 1, pages 649-655, 2003.
209. K. Mikolajczk and C. Schmid. A performance evaluation of local descriptors. In *IEEE Conference on Computer Vision and Pattern Recognition*, vol. 2, pages 257–263, 2003.
210. S. Lazebnik, C. Schmid and J. Ponce. Sparse texture representation using affine-invariant neighborhoods. In *IEEE Conference on Computer Vision and Pattern Recognition*, vol. 2, pages 319-324, 2003.

211. F. Rothganger, S. Lazebnik, C. Schmid and J. Ponce. 3D object modeling and recognition using affine-invariant patches and multi-view spatial constraints. In *IEEE Conference on Computer Vision and Pattern Recognition*, vol. 2, pages 272-277, 2003.
212. K. Mikolajczk and C. Schmid. An affine invariant interest point detector. In *European Conference on Computer Vision*, vol. 1, pages 128-142, 2002.
213. R. Ronfard, C. Schmid and B. Triggs. Learning to parse pictures of people. In *European Conference on Computer Vision*, vol. 4, pages 700-714, 2002.
214. S. Lazebnik, A. Sethi, C. Schmid, D. Kriegman, J. Ponce and M. Hebert. On pencils of tangent planes and the recognition of smooth 3D shapes from silhouettes. In *European Conference on Computer Vision*, vol. 3, pages 651-665, 2002.
215. C. Schmid. Constructing models for content-based image retrieval. In *IEEE Conference on Computer Vision and Pattern Recognition*, vol. 2, pages 39-45, 2001.
216. K. Mikolajczk, R. Choudhury and C. Schmid. Face detection in a video sequence - a temporal approach. In *IEEE Conference on Computer Vision and Pattern Recognition*, vol. 2, pages 96-101, 2001.
217. K. Mikolajczyk and C. Schmid. Indexing based on scale invariant interest points. In *IEEE International Conference on Computer Vision*, vol. 1, pages 525-531, 2001.
218. V. Vogelhuber and C. Schmid. Face detection based on generic local descriptors and spatial constraints. In *International Conference on Pattern Recognition*, vol. 1, pages 1084-1087, 2000.
219. Y. Dufournaud, C. Schmid and R. Horaud. Matching images with different resolutions. In *IEEE Conference on Computer Vision and Pattern Recognition*, vol. 1, pages 612-618, 2000.
220. C. Baillard, C. Schmid, A. Zisserman and A. Fitzgibbon. Automatic line matching and 3D reconstruction of buildings from multiple views. In *ISPRS Conference on Automatic Extraction of GIS Objects from Digital Imagery*, IAPRS vol. 32, Part 3-2W5, pages 69-80, 1999. **Best paper award.**
221. C. Schmid. A structured probabilistic model for recognition. In *IEEE Conference on Computer Vision and Pattern Recognition*, vol. 2, pages 485-490, 1999.
222. C. Schmid and A. Zisserman. The geometry and matching of curves in multiple views. In *European Conference on Computer Vision*, vol. 1, pages 394-409, 1998.
223. C. Schmid, R. Mohr and C. Bauckhage. Comparing and evaluating interest points. In *IEEE International Conference on Computer Vision*, pages 230-235, 1998.
224. R. Mohr, S. Picard and C. Schmid. Bayesian decision versus voting for image retrieval. In *International Conference on Computer Analysis of Images and Patterns*, pages 376-383, 1997.
225. C. Schmid and A. Zisserman. Automatic line matching across views. In *IEEE Conference on Computer Vision and Pattern Recognition*, pages 666-671, 1997.
226. C. Schmid and R. Mohr. Combining greyvalue invariants with local constraints for object recognition. In *IEEE Conference on Computer Vision and Pattern Recognition*, pages 872-877, 1996.
227. C. Schmid and R. Mohr. Image retrieval using local characterization. In *IEEE International Conference on Image Processing*, vol. 2, pages 781-784, 1996.

228. P. Bobet and C. Schmid. Obstacle detection analysis. In *IEEE Conference on Computer Vision and Pattern Recognition*, pages 796-799, 1994.
229. J. Crowley, P. Bobet and C. Schmid. Dynamic calibration of an active stereo head. In *IEEE International Conference on Computer Vision*, pages 734-739, 1993.
230. J. Crowley, P. Bobet and C. Schmid. Maintaining stereo calibration by tracking image points. In *IEEE Conference on Computer Vision and Pattern Recognition*, pages 483-488, 1993.
231. J. Crowley, P. Bobet and C. Schmid. Auto-calibration of a stereo head to object centered reference frames. In *International Conference on Intelligent Autonomous Systems*, 1993.

Refereed national conferences

1. M. Caron, N. Houlsby and C. Schmid. Location-Aware Self-Supervised Transformers. In *Winter Conference on Applications of Computer Vision*, 2024.
2. T. Bird, A. Iscen, M. Caron, A. Fathi and C. Schmid. A Memory Transformer Network for Incremental Learning. In *British Machine Vision Conference*, 2022.
3. V. Gabeur, A. Nagrani, C. Sun, K. Alahari and C. Schmid. Masking Modalities for Cross-Modal Video Retrieval. In *Winter Conference on Applications of Computer Vision*, 2022.
4. A. Iscen, A. Araujo, B. Gong and C. Schmid. Class-Balanced Distillation for Long-Tailed Visual Recognition. In *British Machine Vision Conference*, 2021.
5. V. Sydorov, K. Alahari and C. Schmid. Focused attention for action recognition. In *British Machine Vision Conference*, 2019.
6. N. Chesneau, G. Rogez, K. Alahari and C. Schmid. Detecting parts for action localization. In *British Machine Vision Conference*, 2017.
7. M. Paulin, J. Revaud, Z. Harchaoui, F. Perronnin and C. Schmid. Selection itérative de transformations pour la classification d'images. In *Congrès de Reconnaissance des Formes et Intelligence Artificielle*, 2014.
8. A. Gaidon, Z. Harchaoui and C. Schmid. Recognizing activities with cluster-trees of tracklets. In *British Machine Vision Conference*, 2012.
9. A. Gaidon, Z. Harchaoui and C. Schmid. A time series kernel for action recognition. In *British Machine Vision Conference*, 2011.
10. H. Jegou, M. Douze and C. Schmid. Représentation compacte des sacs de mots pour l'indexation d'images. In *Congrès de Reconnaissance des Formes et Intelligence Artificielle*, 2010.
11. M. Guillaumin, T. Mensink, J. Verbeek and C. Schmid. Apprentissage de distance pour l'annotation d'images par plus proches voisins. In *Congrès de Reconnaissance des Formes et Intelligence Artificielle*, 2010.
12. A. Gaidon, M. Marszałek and C. Schmid. Mining visual actions from movies. In *British Machine Vision Conference*, 2009.
13. H. Wang, M. M. Ullah, A. Kläser, I. Laptev and C. Schmid. Evaluation of local spatio-temporal features for action recognition. In *British Machine Vision Conference*, 2009.

14. A. Kläser, M. Marszalek and C. Schmid. A spatio-temporal descriptor based on 3D-gradients. In *British Machine Vision Conference*, 2008.
15. C. Bouveyron, J. Kannala, C. Schmid and S. Girard. Object localization by subspace clustering of local descriptors. In *5th Indian Conference on Computer Vision, Graphics and Image Processing*, 2006. **Best paper award, honorable mention.**
16. M. Heikkilä, M. Pietikäinen and C. Schmid. Description of interest regions with center-symmetric local binary patterns. In *5th Indian Conference on Computer Vision, Graphics and Image Processing*, 2006.
17. J. Blanchet, F. Forbes and C. Schmid. Markov random fields for textures recognition with local invariant regions and their geometric relationships. In *British Machine Vision Conference*, 2005.
18. J. Blanchet, F. Forbes and C. Schmid. Modèles markoviens pour l'organisation spatiale de descripteurs d'images. In *Conférence francophone sur l'apprentissage automatique*, 2005.
19. S. Lazebnik, C. Schmid and J. Ponce. Semi-local affine parts for object recognition. In *British Machine Vision Conference*, vol. 2, pages 959-968, 2004.
20. K. Mikolajczk, A. Zisserman and C. Schmid. Shape recognition with edge-based features. In *British Machine Vision Conference*, vol. 2, pages 779-788, 2003.
21. C. Schmid. Apprentissage de modèles pour la recherche d'images. In *Congrès de Reconnaissance des Formes et Intelligence Artificielle*, vol. 3, pages 781-789, 2002.
22. Y. Dufournaud, C. Schmid and R. Horaud. Appariement d'images à des échelles différentes. In *Congrès de Reconnaissance des Formes et Intelligence Artificielle*, vol. 2, pages 327-336, 2000.
23. S. Benayoun, H. Bernard, P. Bertolino, M. Gelgon, C. Schmid and F. Spindler. Structuration de vidéos pour des interfaces de consultation avancées. In *Compression et Représentation des Signaux Audiovisuels*, 1998.
24. C. Schmid and R. Mohr. Mise en correspondance par invariants locaux. In *Congrès de Reconnaissance des Formes et Intelligence Artificielle*, pages 236-245, 1996.