Philippe Weinzaepfel

☎ +33 4 76 61 41 69
✉ philippe.weinzaepfel@gmail.com
homepage

Work Experiences

2017–now **Research Scientist**, *Computer Vision group, Naver Labs Europe, Meylan, France.*

2016–2017 **Research Scientist**, *Computer Vision group, Xerox Research Center Europe, Meylan, France.*
Research on computer vision (action recognition and detection, video analysis, human pose estimation, semantic segmentation, object detection) and deep learning.

2012–2016 **PhD candidate**, *Lear/Thoth teams, Inria Grenoble, France.*
Research on image matching, optical flow, action recognition and detection, deep convolutional neural networks, weakly-supervised learning. Expertise in state-of-the-art computer vision (local image and video features, object detection, semantic segmentation, tracking, human pose estimation), machine learning (neural networks, kernel methods) and optimization (non-linear and non-convex optimization, iterative methods, finite element method).

Jan–July 2012 **Research internship**, *Lear team, Inria Grenoble, France.*
Research on matching and large displacements optical flow. Implementation of a variational method.

May–Sep 2011 **Research internship**, *Technicolor research center, Palo Alto, California, USA.*
Research on automatic video tagging in real-time.

May–July 2010 **Research internship**, *Texmex team, Inria Rennes, France.*
Research on reconstructing an image from its local descriptor.

Education

2012–2016 **PhD in Computer Science and Applied Mathematics,** Motion in action: optical flow estimation and action localization in videos, Lear/Thoth teams, Laboratoire Jean Kuntzmann (LJK), Inria Rhône-Alpes and University Grenoble Alpes, Grenoble, France.

2011–2012 **Second year of MSc in Informatics (Graphics, Vision and Robotics),** *with first class honors, ranked 1st of 90,* University Joseph Fourier, Grenoble, France.

2010–2011 **First year of MSc in Informatics**, University of Rennes 1, France, co-authorized by the Ecole Normale Supérieure de Cachan – Brittany extension, Rennes, France.

2009–2010 **Bachelor of Science in Informatics,** *with first class honors, ranked 1st of 128,* University of Rennes 1, France, co-authorized by the Ecole Normale Supérieure de Cachan – Brittany extension, Rennes, France.

2009 Admissible to the Ecole Normale Supérieure de Cachan – Brittany extension, Rennes, France.

2007–2009 **Preparatory classes for French 'Grandes Ecoles',** *Mathematics, Computer Science, Physics (MPSI/MP*),* Lycée Joffre, Montpellier, France.

Communication Skills

With humans

French Mother tongue

English Working proficiency

With computers

Languages Python, C, C++, Matlab, Bash, LaTeX, elements of web programming (HTML5, Javascript)

Publications

Publications in peer-reviewed international journals

DeepMatching: Hierarchical Deformable Dense Matching.
J. Revaud, P. Weinzaepfel, Z. Harchaoui, C. Schmid, *IJCV 2016*.

Publications in peer-reviewed international conferences

Reconstructing an image from its local descriptors.
P. Weinzaepfel, H. Jégou, P. Pérez, *CVPR 2011*.

DeepFlow: Large displacement optical flow with deep matching.
P. Weinzaepfel, J. Revaud, Z. Harchaoui, C. Schmid, *ICCV 2013 (oral)*.

EpicFlow: Edge-Preserving Interpolation of Correspondences for Optical Flow.
J. Revaud, P. Weinzaepfel, Z. Harchaoui, C. Schmid, *CVPR 2015 (oral)*.

Learning to Detect Motion Boundaries.
P. Weinzaepfel, J. Revaud, Z. Harchaoui, C. Schmid, *CVPR 2015*.

Learning to Track for Spatio-Temporal Action Localization.
P. Weinzaepfel, Z. Harchaoui, C. Schmid, *ICCV 2015*.

LCR-Net: Localization-Classification-Regression for Human Pose.
G. Rogez, P. Weinzaepfel, C. Schmid, *CVPR 2017 (spotlight)*.

Joint learning of object and action detectors.
V. Kalogeiton, P. Weinzaepfel, V. Ferrari, C. Schmid, *ICCV 2017*.

Action Tubelet Detector for Spatio-Temporal Action Localization.
V. Kalogeiton, P. Weinzaepfel, V. Ferrari, C. Schmid, *ICCV 2017*.

Other publications

Human Action Localization with Sparse Spatial Supervision.
P. Weinzaepfel, X. Martin, C. Schmid, *arXiv 2016*.

Supervision / Teaching

Supervision	Undergraduate internship: Quentin Cormier (2014). Graduate internship: Erwan Le Roux (2016).
Teaching Courses	Introduction to UNIX and to programming in C (33.5h in 2013 and 2014, 67.5h in 2015), Bachelor in Physics and Mathematics, DLST, University Joseph Fourier, Grenoble, France.
Pratical Sessions	IP networks (18h in 2013-2014 and in 2014-2015), first year of MSc in Informatics (MIAGE), University Joseph Fourier, Grenoble, France.
	Introduction to networks (12h in 2013-2014), first year of engineer school (RICM), Polytech Grenoble, France.
	Introduction to networks (15h in 2014-2015), first year of MSc in Informatics, University Joseph Fourier, Grenoble, France.

Other Research Activties

Softwares	DeepFlow, DeepMatching, EpicFlow, Motion boundaries detection.
Datasets	YouTube Motion Boundaries (YMB), Daily Action Localization in YouTube (DALY).
Reviewing	Conferences: ICCV'15, ECCV'16, CVPR'17. Journals: IJCV, IEEE trans. PAMI.
Invited talks	At UC Berkeley in Dec 2014.