Julia Peyre

I have completed my PhD at INRIA Paris, advised by Josef Sivic, Ivan Laptev and Cordelia Schmid. My research has focused on developping deep learning models for automatic image understanding. I also graduated from Ecole polytechnique in 2016 and got a Masters Degree in Mathematics, Machine Learning and Computer Vision (MVA) from Ecole Normale Supérieure de Cachan.

Education

- 2015–2019 **Phd in computer vision**, *Willow, INRIA*, Ecole Normale Supérieure, France. Developping deep learning models to reason about visual scenes with language
- 2014–2015 **MSc in machine learning**, *MVA*, Ecole Normale Supérieure de Cachan, France. Machine learning, computer vision, deep learning, graphical models, reinforcement learning
- 2011–2014 **Ecole Polytechnique**, *Palaiseau*, France. Major in applied mathematics : operations research, probability and statistics

Research experience

- 2017-2019 **Monitoring**, *MVA*, ENS Cachan. Supervising master projects on image captioning and retrieval with natural language queries
- 2017-2019 Reviewing for conferences and journals, NIPS, IJCV.
 - 2016 **Teaching Assistant**, *MVA*, ENS Cachan. Introduction to Probabilistic Graphical Models
 - 2015 **Graduate Student Researcher**, *Willow, INRIA Paris.* Developping deep learning models for object classification with noisy text labels
 - 2014 **Graduate Student Researcher**, *UC Davis, Department of mathematics*, USA. Developping regression models to predict wind scenarios for optimal dispatching of electricity

Publications

2019 J. Peyre, I. Laptev, C. Schmid, J. Sivic, *Detecting unseen visual relations using analogies*, In ICCV 2019.

We propose a deep learning model for zero-shot visual relation detection

2017 **J. Peyre,** I. Laptev, C. Schmid, J. Sivic, *Weakly-supervised learning of visual relations*, ICCV 2017 (oral, acceptance rate 2.1%).

We propose a discriminative clustering approach to detect visual relation with minimal supervision

Miscellaneous

Computer Python, Matlab, Pytorch, Linux. Languages French (native), English (professional).

References

PhD advisors, Josef Sivic, Ivan Laptev, Cordelia Schmid.