# Ievgen Redko

Associate professor at Hubert Curien Laboratory

Université Jean Monnet de Saint-Étienne 18 rue du Professeur Lauras 42000 Saint-Etienne - France ⊠ ievgen.redko@univ-st-etienne.fr Age: 31

# Work experience

Sep., 2018 - Hubert Curien Laboratory - Saint-Etienne, France

present Associate professor, Data Intelligence team.

Working on statistical machine learning.

• Transfer learning and domain adaptation. • Applications to healthcare.

• Optimal transport in machine learning

Sep., 2016 - CREATIS Laboratory - Villeurbanne, France

Aug., 2018 Associate professor, Images and models team.

Working on the application of machine learning to medical imaging.

• Epileptic lesion detection.

 Grant holder of INS2I JCJC and CNRS Imag'In calls for projects.

• Prostate cancer mapping. Imag'In calls Feb., 2016 – **Hubert Curien Laboratory - Saint-Etienne, France** 

Aug., 2016 Post-doctoral fellow, Data Intelligence team.

Multiview learning with interecting views - Collaboration with LIP6, LIF, Picxel, INT

Oct., 2012 - Computer Science Laboratory of Paris 13 University (LIPN) - Paris, France

Sep., 2015 PhD student, Machine Learning and Applications team.

Topic: Non-negative matrix factorization for unsupervised transfer learning.

## Research activities

## Student supervision

Dec., 2019 - PhD student, CEA LIST

present Few shot learning: Application to object detection and semantic segmentation, Quantin Bouinot.

 $\bullet\,$  Co-supervision with Amaury Habrard (PR UJM), Romaric Audigier (Researcher engineer CEA)

Sep., 2019 - PhD student, THALES

present Anomaly detection with deep metric learning, Yevhenii Zotkin.

• CIFRE scholarship • Co-supervision with Marc Sebban (PR UJM)

Sep., 2017 – PhD student, CREATIS, INSA de Lyon

present Provably accurate metric learning for heterogeneous medical imaging: application to multi-view learning and domain adaptation, Sofiane Dhouib.

• Government scholarship • Co-supervision with Carole Lartizien (CR1 CNRS)

Sep., 2018 – PhD student, Physics lab, ENS de Lyon present Transfer learning on graphs, Yacouba Kaloga.

• Co-supervision with P. Borgnat (DR CNRS), M. Foare (MCU ENS), A. Habrard (PR UJM)

Feb., 2017 - Internships.

Aug., 2020 • Nina Vesseron: Game theory and machine learning

- Deepakumar Moorthy: AI and creativity for design
- Robin Khatri: Machine learning for bone porosity estimation
- Sixian Xu: Machine learning for single-pixel camera
- Léo Gautheron: Optimal transport for prostate cancer mapping
- o Dimitrios Tsolakidis: Multi-view learning for epilepsy lesion detection

#### Community service

#### Conferences

- Reviewer: ICML'20, NeurIPS'20,'19 (best reviewer prize), IJCAI'18 (distinguished PC prize)
- Program committee: IJCAI'18, National Conference on Machine Learning (CAp)

#### Journals.

• Reviewer: Annals of Statistic, JMLR, TKDE, Neurocomputing, Pattern recognition

### Software.

• Contributor: Python Optimal Transport toolbox

## Selected recent publications

- [1] Sofien Dhouib, **Ievgen Redko**, and Carole Lartizien. Margin-aware adversarial domain adaptation with optimal transport. In *ICML*, pages 4619–4629. 2020.
- [2] Sofien Dhouib, **Ievgen Redko**, Tanguy Kerdoncuff, Rémi Emonet, and Marc Sebban. A swiss army knife for minimax optimal transport. In *ICML*, pages 7613–7622. 2020.
- [3] **Ievgen Redko**, Amaury Habrard, and Marc Sebban. On the analysis of adaptability in multi-source domain adaptation. *Machine Learning*, 108(8-9):1635–1652, 2019.
- [4] **Ievgen Redko** and Charlotte Laclau. On fair cost sharing games in machine learning. In AAAI, pages 4790–4797, 2019.
- [5] **Ievgen Redko**, Nicolas Courty, Rémi Flamary, and Devis Tuia. Optimal transport for multisource domain adaptation under target shift. In *AISTATS*, pages 849–858, 2019.
- [6] Sofiane Dhouib and **Ievgen Redko**. Revisiting (\epsilon, \gamma, \tau)-similarity learning for domain adaptation. In NIPS, pages 7408–7417, 2018.
- [7] Charlotte Laclau, **Ievgen Redko**, Basarab Matei, Younès Bennani, and Vincent Brault. Coclustering through optimal transport. In *ICML*, pages 1955–1964, 2017.