CHANGJIAN SHUI

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EDUCATION

Université Laval, Quebec, Canada

2017.05 - 4.2/4.33

Phd. in Electric engineering

Supervisor: Christian Gagné

2015.09-2016.10

ENS Cachan, Cachan, France

Master, Applied Math

cum laude, 14.75/20

Program: MVA Mathematics, Vision, Learning

2013.09-2015.07

Telecom Paris Tech, Paris, France Engineering, Signal/Image Processing

RESEARCH

I am interested in the algorithmic and theoretical aspects in the Transfer machine learning (domain adaptation, active learning, multi-task learning).

SELECTIVE PUBLICATIONS (AS FIRST AUTHOR)

- 1. Deep Active Learning: Unified and Principled Method for Query and Training. Changjian Shui, Fan Zhou, Christian Gagné, Boyu Wang. AISTATS, 2020.
- 2. A Principled Approach for Learning Task Similarity in Multitask Learning. Changjian Shui, Mahdieh Abbasi, Louis-Émile Robitaille, Boyu Wang, Christian Gagné. IJCAI, 2019 (acceptance rate: 17.9%)

ALL PUBLICATIONS (REPORT AND INVOLVING)

- 1. Toward Metrics for Differentiating Out-of-Distribution Sets. Mahdieh Abbasi, Changjian Shui, Arezoo Rajabi, Christian Gagné, Rakesh Bobba. ECAI 2020 (acceptance rate: 26.8%)
- 2. Accumulating Knowledge for Lifelong Online Learning. Changjian Shui, Ihsen Hedhli, Boyu Wang, Christian Gagné. arXiv:1810.11479 (2018).
- 3. "Diversity regularization in deep ensembles." **Changjian Shui**, Azadeh Sadat Mozafari, Jonathan Marek, Ihsen Hedhli, Christian Gagné. arXiv:1802.07881 (2018)

TRAINING EXPERIENCE

Armines

2016.05-2016.10

Master Internship

Saint Etienne, France

- · Supervised by Dr. Johan DEBAYLE.
- · Subject: Characterization of granular media in gas-solid systems by image analysis
- · Development mathematical and numerical approach for analysis granules in chemical process and simulate the graunles via Stochastic Geometry.

Insititut Pasteur

2014.08-2015.02

Ingénieur Internship

Paris, France

· Supervised by Prof Christophe ZIMMER.

- · Subject: Spatial-temporal deconvolution in super-resolution microscopy
- · Development of temporal models based on Markov continuous time model to improve the resolution of super-resolution microscopy.

ACADEMIC ACTIVITIES

• Conference Reviewer: ICLR 2020,2021, NeurIPS 2020

• Journal Reviewer: Machine Learning

PRIZE

• Travel Grant, IJCAI 2019

TEACHING EXPERIENCE

• TA, GIF7005 Introduction to Machine learning (2018, 2019)

TECHNICAL SKILLS

Programming Languages MATLAB, Python (PyTorch), Latex

LANGUAGES

English Good

French Good

Chinese Native

Last update: July 11, 2020;