Yu-Guan Hsieh

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EDUCATION

2019 - present	LJK, Univ. Grenoble Alpes, MIAI, Grenoble, France PhD in optimization and machine learning. Thesis: Minimax optimization and online learning. Supervisors: Franck lutzeler, Jérôme Malick, and Panayotis Mertikopoulos.
2018 - 2019	École normale supérieure Paris-Saclay, Cachan, France MSC degree in Mathematics, Computer Vision, Machine Learning (MVA). Grade: 18.05/20 (Success with Highest Honors).
2016 - 2020	École normale supérieure, Paris, France BSC degree and MSC in computer science. Grades: 17.22/20 and 17.6/20. ENS graduate degree as <i>normalien</i> .
2014 - 2016	Lycée du Parc, Lyon, France Intensive preparatory program leading to competitive entrance exams to French Grandes Écoles. Main subjects: Mathematics and Physics (MP* info).

RELEVANT EXPERIENCE

2019 Apr Sept. Jean Kuntzmann Laboratory (UMR 5224 CNRS), Grenoble, F

Research internship- Extragradient and its Variants

Derived convergence guarantees of several extragradient-type methods for solving variational inequalities, with a focus on stochastic setting.

Supervised by Franck lutzeler, Jérôme Malick, and Panayotis Mertikopoulos.

2018 Mar. - Aug. RIKEN Center for Advanced Intelligence Project, Tokyo, Japan.

Research internship- Weakly supervised learning

Worked on semi-supervised learning, learning with noisy labels and positive-unlabeled learning. Main mathematical tools included concentration bounds and Rademacher complexity.

Supervised by Gang Niu and Masashi Sugiyama.

2018 June - Aug. Behaviors.ai, Lyon, France.

Research internship- Multimodal learning

Studied how to learn a shared latent representation from multimodal data through deep learning methods. Some related topics are transfer learning and developmental robotics.

Supervised by Amélie Cordier and Mathieu Lefort.

Publications and preprints

- Yu-Guan Hsieh, Franck lutzeler, Jérôme Malick, and Panayotis Mertikopoulos. *Explore Aggressively, Update Conservatively: Stochastic Extragradient Methods with Variable Stepsize Scaling.* Submitted, 2020.
- Yu-Guan Hsieh, Franck lutzeler, Jérôme Malick, and Panayotis Mertikopoulos. *On the Convergence of Single-Call Stochastic Extra-Gradient Methods.* In **NeurIPS**, 2019.
- Yu-Guan Hsieh, Gang Niu, and Masashi Sugiyama. Classification from Positive, Unlabeled and Biased Negative Data. In ICML, 2019.

Miscellaneous

- Serve as reviewer for ICML and NeurIPS (among the top 400 in 2019).
- Silver medal in International Mathematical Olympiad 2013.

Languages Mandarin (native), French (fluent), English (fluent) and Japanese (basic).