

EDUCATION

- 2019 - present **LJK, Univ. Grenoble Alpes, MIAI, Grenoble, France**
PhD in optimization and machine learning.
Thesis: Minimax optimization and online learning.
Supervisors: Franck Iutzeler, 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 *normalien*.

RELEVANT EXPERIENCE

- 2019 Apr. - Sept. **Jean Kuntzmann Laboratory (UMR 5224 CNRS), Grenoble, France.**
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 Iutzeler, 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 Iutzeler, Jérôme Malick, and Panayotis Mertikopoulos. *Optimization in Open Networks via Dual Averaging*. Submitted to CDC, 2021.
- Yu-Guan Hsieh, Kimon Antonakopoulos, and Panayotis Mertikopoulos. *Adaptive Learning in Continuous Games: Optimal Regret Bounds and Convergence to Nash Equilibrium*. Submitted to COLT, 2021.
- Yu-Guan Hsieh, Franck Iutzeler, Jérôme Malick, and Panayotis Mertikopoulos. *Multi-agent Online Optimization with Delays: Asynchronicity, Adaptivity, and Optimism*. arXiv preprint arXiv:2012.11579, 2020.
- Yu-Guan Hsieh, Franck Iutzeler, Jérôme Malick, and Panayotis Mertikopoulos. *Explore Aggressively, Update Conservatively: Stochastic Extragradient Methods with Variable Stepsize Scaling*. In **NeurIPS** (Spotlight), 2020.
- Yu-Guan Hsieh, Franck Iutzeler, 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 ICML, NeurIPS and ICLR reviewer.
- Silver medal in International Mathematical Olympiad 2013.

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