

Xuedong Shang

Curriculum Vitae

Education

- 2017–2021 **PhD in Computer Science**, *Inria*, Lille, France.
machine learning, multi-armed bandits, zeroth-order optimization, reinforcement learning
- 2015–2017 **Master of Computer Science**, *École normale supérieure de Cachan*, Rennes, France.
- 2014–2015 **Bachelor of Computer Science**, *École normale supérieure de Cachan*, Rennes, France.
- 2012–2013 **Bachelor of Mathematics**, *Université Pierre et Marie Curie (Paris VI)*, Paris, France.
- 2008–2011 **Mathematical Preparatory Class**, *Lycée Henri Poincaré*, Nancy, France.
post-secondary preparatory classes preparing for highly selective entrance examinations to the French Grandes Ecoles, including intense courses on mathematics, physics, chemistry, computer science and philosophy

Training

- July 2019 **Reinforcement Learning Summer School**, Lille, France.
reinforcement learning, bandits
- Jan 2019 **Machine Learning Summer School**, Stellenbosch, South Africa.
machine learning

Publications

Conference Papers

- ICML 2020 **Gamification of pure exploration for linear bandits**, in Proceedings of the 37th International Conference on Machine Learning.
Rémy Degenne, Pierre Ménard, **Xuedong Shang** and Michal Valko
- AIStats 2020 **Fixed-confidence guarantee for Bayesian best-arm identification**, in Proceedings of the 23rd International Conference on Artificial Intelligence and Statistics, Palermo, Italy.
Xuedong Shang, Rianne de Heide, Emilie Kaufmann, Pierre Ménard and Michal Valko
- ALT 2019 **General parallel optimization without metric**, in Proceedings of the 30th International Conference on Algorithmic Theory, Chicago, USA.
Xuedong Shang, Emilie Kaufmann and Michal Valko

Journal Papers

Workshop Papers

25, rue de Tournai – 59800 Lille

📞 +33 651882289 • 📞 00892165648623 • ✉ xuedong.shang@inria.fr
🌐 xuedong.github.io

ICML 2019 - **A simple dynamic bandit algorithm for hyper-parameter tuning**, in 6th ICML AutoML Workshop on Automated Machine Learning, Long Beach, USA.

Xuedong Shang, Emilie Kaufmann and Michal Valko

EWRL 2018 **Adaptive black-box optimization got easier: HCT only needs local smoothness**, in 14th European Workshop on Reinforcement Learning, Lille, France.

Xuedong Shang, Emilie Kaufmann and Michal Valko

Preprints

Stochastic bandits with vector losses: Minimizing ℓ^∞ -norm of relative losses, submitted.

Xuedong Shang, Han Shao and Jian Qian

Simple (dynamic) algorithms for hyper-parameter optimization.

Xuedong Shang, Emilie Kaufmann and Michal Valko

Time series clustering.

Dominique Barbe, Alexandre Debant and **Xuedong Shang**

Experience

Vocational

October **PhD Candidate**, *SequeL, Inria Lille-Nord Europe*, Lille, France.

2017–March Adaptive Methods for Optimization in Stochastic Environments, under the supervision of
2021 Emilie Kaufmann & Michal Valko

March **Research Engineer**, *Noah Ark's Lab*, Paris, France.

2020–August Automated Machine Learning, working with Balázs Kégel and Igor Colin
2020

February **Research Internship**, *SequeL, Inria Lille-Nord Europe*, Lille, France.

2017–July Hierarchical Bandits for "Black Box" Optimisation and The Monte-Carlo Tree Search, under
2017 the supervision of Emilie Kaufmann & Michal Valko

May **Research Internship**, *Yamamoto-Cuturi Lab., Graduate School of Informatics*,

2016–July *Kyoto University*, Kyoto, Japan.

2016 Optimal Transport Geometry for Machine Learning Problems, under the supervision of
Marco Cuturi

May **Research Internship**, *Magnet, Inria Lille-Nord Europe*, Lille, France.

2015–July Recommender System, under the supervision of Marc Tommasi
2015

June **Research Internship**, *CNRS Vérimag*, Grenoble, France.

2012–July On the Generation of Positivstellensatz Witnesses in Degenerate Cases, under the
2012 supervision of David Monniaux

Others

May **Secretary-General**, *Union des étudiants et chercheurs chinois à Lille (UCECL)*,

2019–May Lille, France.

2020

25, rue de Tournai – 59800 Lille

☎ +33 651882289 • ☎ 00892165648623 • ✉ xuedong.shang@inria.fr
🌐 xuedong.github.io

June 2018–May 2019 **Member**, *Publicity Department, Union des étudiants et chercheurs chinois à Lille (UCECL)*, Lille, France.

July 2013–August 2013 **Summer Internship**, *Corporate Banking Department, Industrial and Commercial Bank of China*, Shanghai, China.

August 2012 **Summer Internship**, *International Business Department, Agricultural Bank of China*, Shanghai, China.

Computer skills

Programming languages	C, C++, C#, Objective-C, Swift, Java, Python, Julia, Ruby, R, OCaml, Kotlin, Rust, Golang, Scala, Haskell, Elixir, Clojure, Bash	Web	HTML5/CSS3, Bootstrap, jQuery, JSON/Ajax, JavaScript, Sass, React, D3, Node.js, MongoDB
Operating systems	Linux, Windows, Mac OS	Numerical	Maple, Matlab/Octave
Machine learning	scikit-learn, PyTorch, Theano	Other	L ^A T _E X, Git, SVN, Vim, Emacs, Jupyter Notebook

Services

NIPS 2017, External Reviewer.
NeurIPS 2019*, **2020****, Reviewer.
ICML 2018, 2019, External Reviewer.
AISTats 2019, External Reviewer.
ICLR 2021, ICLR 2019 Workshop LLD, Reviewer.
RLSS 2019, Organization Committee, Teaching Assistant.
 * - top reviewer, ** - best reviewer

Languages

English	Full Professional Proficiency	TOEIC 925
French	Native/Bilingual Proficiency	
Chinese Mandarin	Mother Tongue	
Chinese Shanghaiese	Mother Tongue	
Japanese	Limited Working Proficiency	
Spanish	Limited Working Proficiency	

Interests

Academic Maths, Finance, Neuroscience, e-Education

25, rue de Tournai – 59800 Lille

☎ +33 651882289 • ☎ 00892165648623 • ✉ xuedong.shang@inria.fr
 🌐 xuedong.github.io

Sports Football, Basketball, Ski, Cycling, Bouldering
Arts Piano

Extra

Eduinfinity Team leader on computer science courses *A translation group providing chinese subtitles for courses on Coursera.org, edX.org, etc*

Wikipedia Wikipedian in English, French, Chinese and Japanese

Unef Foreign student candidate at ENS *National union of students of France*

25, rue de Tournai – 59800 Lille

📞 +33 651882289 • 📞 00892165648623 • ✉️ xuedong.shang@inria.fr
🌐 xuedong.github.io