

Xuedong Shang

Curriculum Vitae

Education

- 2017–2021 **PhD in Computer Science**, *Inria*, Lille, France.
machine learning, multi-armed bandits, 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

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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

How to live with each other: A fair regret for bandits with vector payoffs.

Jian Qian, **Xuedong Shang** and Han Shao

Simple (dynamic) algorithms for hyper-parameter optimization.

Xuedong Shang, Emilie Kaufmann, Michal Valko

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
September **Research Project**, *COSTEL, LETG Rennes*, Rennes, France.
2015–May Time Series Clustering, under the supervision of Thomas Corpetti & Romain Tavenard
2016
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

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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, Scala, Haskell, Elixir, Clojure, Rust, Golang, 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.

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

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Extra

Eduinfinity	Team leader on computer science courses	<i>A translation group providing chinese subtitles for courses on Coursera.org, edX.org, etc</i>
Wikipedia	Wikipedian in English, French, Chinese and Japanese	
Unef	Foreign student candidate at ENS	<i>National union of students of France</i>

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