

# Xuedong Shang

## Curriculum Vitae

### Education

- 2017– **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

- 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

- ICML 2019 - **A simple dynamic bandit algorithm for hyper-parameter optimization**, in 6th AutoML ICML Workshop on Automated Machine Learning, Long Beach, USA.  
**Xuedong Shang**, Emilie Kaufmann and Michal Valko

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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](#)

**Gamification of pure exploration for linear bandits**, arXiv preprint.  
Rémy Degenne, Pierre Ménard, **Xuedong Shang** and Michal Valko

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## Experience

### Vocational

October 2017–  
2017–  
March 2020–August 2020  
February 2017–July 2017  
May 2016–July 2016  
September 2015–May 2016  
May 2015–July 2015  
June 2012–July 2012

**PhD Candidate**, *SequeL, Inria Lille-Nord Europe*, Lille, France.  
Adaptive Methods for Optimization in Stochastic Environments, under the supervision of Emilie Kaufmann & Michal Valko

**Research Engineer**, *Huawei Noah Ark's Lab*, Paris, France.  
Automated Machine Learning

**Research Internship**, *SequeL, Inria Lille-Nord Europe*, Lille, France.  
Hierarchical Bandits for "Black Box" Optimisation and The Monte-Carlo Tree Search, under the supervision of Emilie Kaufmann & Michal Valko

**Research Internship**, *Yamamoto-Cuturi Lab., Graduate School of Informatics, Kyoto University*, Kyoto, Japan.  
Optimal Transport Geometry for Machine Learning Problems, under the supervision of Marco Cuturi

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

**Research Internship**, *Magnet, Inria Lille-Nord Europe*, Lille, France.  
Recommender System, under the supervision of Marc Tommasi

**Research Internship**, *CNRS Vérimag*, Grenoble, France.  
On the Generation of Positivstellensatz Witnesses in Degenerate Cases, under the supervision of David Monniaux

### Others

May 2019–May 2020  
June 2018–May 2019  
July 2013–August 2013

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

**Member**, *Publicity Department, Union des étudiants et chercheurs chinois à Lille (UCECL)*, Lille, France.

**Summer Internship**, *Corporate Banking Department, Industrial and Commercial Bank of China*, Shanghai, China.

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🌐 [xuedong.github.io](https://xuedong.github.io)

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 <sup>A</sup> T <sub>E</sub> X, Git, SVN, Vim, Emacs, Jupyter Notebook

## Services

**NIPS 2017**, External Reviewer.

**NeurIPS 2019**, Reviewer.

**ICML 2018, 2019**, External Reviewer.

**AISTATS 2019**, External Reviewer.

**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	

## Interests

Academic	Maths, Finance, Neuroscience, e-Education
Sports	Football, Basketball, Ski, Cycling, Bouldering
Arts	Piano

## 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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