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

ICML 2019 - AutoML	**A simple dynamic bandit algorithm for hyper-parameter tuning**, in 6th ICML 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 2017–March 2021	**PhD Candidate**, *SequeL, Inria Lille-Nord Europe*, Lille, France. Adaptive Methods for Optimization in Stochastic Environments, under the supervision of Emilie Kaufmann & Michal Valko
March 2020–August 2020	**Research Engineer**, *Noah Ark's Lab*, Paris, France. Automated Machine Learning, working with Balázs Kégel and Igor Colin
February 2017–July 2017	**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
May 2016–July 2016	**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
September 2015–May 2016	**Research Project**, *COSTEL, LETG Rennes*, Rennes, France. Time Series Clustering, under the supervision of Thomas Corpetti & Romain Tavenard
May 2015–July 2015	**Research Internship**, *Magnet, Inria Lille-Nord Europe*, Lille, France. Recommender System, under the supervision of Marc Tommasi
June 2012–July 2012	**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	**Secretary-General**, *Union des étudiants et chercheurs chinois à Lille (UCECL)*, Lille, France.

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	LaTeX, 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 Shanghainese	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

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*