

Raymond Zhang

Curriculum Vitae

3 Rue Joliot-Curie
Gif-sur-Yvette, France 91190
✉ raymond.zhang@ens-paris-saclay.fr

Education

- 2022–Present **CentraleSupélec, PhD Candidate.**
Structured Bandits, Distributed Bandits, Bayesian Algorithms
- 2020 **ENS Paris-Saclay - MCS Second year graduate study**, *Mathématiques Vision Apprentissage (MVA)*.
- 2019 **ENS Paris-Saclay - MCS First year graduate study**, *Jacques Hadamard*.
- 2018 **ENS Paris-Saclay - Bachelor of mathematics** .
- 2015–2017 **Higher School Preparatory Classes MPSI-PSI***, *Lycée Sainte Geneviève*, Versailles.
- 2015 **Baccalauréat engineering science**, *Lycée Gustave Eiffel*, Bordeaux.

Working Experience

- December 2022– Now **PhD candidate**, *Laboratoires des Systèmes et Signaux*, Supervised by Richard Combes and Sheng Yang.
Structured Bandits, Distributed Bandits, Bayesian Algorithms
- 2021 **Research Engineer**, *Inria Bordeaux*, Working under François Dufour and Alexandre Genadot.
RL for Bearing Only Tracking
- 2021 **Predoc Internship**, *KTH Decision control laboratory*, Supervised by Alexandre Proutiere.
Best Arm identification, Markov chain Regression
- 2020 **Master internship**, *Centrale Supélec, Gif sur Yvette, France*, Supervised by Richard Combes.
Curse of dimensionality of combinatorial Thompson Sampling
- 2019 **Master internship**, *The Alan Turing Institute, London, The United Kingdom*, Supervised by Neil Walton.
Deep Reinforcement learning applied to traffic control in urban area
- 2018 **Bachelor internship**, *Centre des mathématiques et de leurs applications, CMLA, Cachan, France*, Supervised by Jean-Michel Morel, Pablo Arias and Thibaud Erhet , ENS Paris-Saclay.
Deep burst denoising, Image and video denoising with deep convolutional neural networks
Python & Pytorch

Teaching

- 2024 **CentraleSupélec**, 64h.
Bachelor Math Refreshers, Linear Optimization, Introduction to Information Theory, Network Science, Machine Learning, Reinforcement Learning

2023 **CentraleSupélec**, 64h.

Bachelor Math Refreshers, Introduction to Information Theory, Introduction to Deep Learning, Network Science, Machine Learning, Reinforcement Learning

Publications

2021 **Thompson Sampling For Combinatorial Bandits : Polynomial Regret and Mismatched Sampling Paradox**, *NeurIPS2021*, Spotlight.

<https://arxiv.org/abs/2410.05441>

2021 **On the Suboptimality of Thompson Sampling in High Dimensions**, *NeurIPS2021*.

<https://arxiv.org/abs/2102.05502>

2021 **Reinforcement Learning for Traffic Signal Control : Comparison with Commercial Systems**, *CIT2021*.

<https://arxiv.org/pdf/2104.10455.pdf>

Languages

French **Mother tongue**

English **C1 level**

Chinese **Intermediate**

Cambridge Advanced

Spoken