Avetik Karagulyan

Contacts

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Education

September 2018	Ph.D. under superivision of prof. Arnak Dalalyan
	ENSAE/CREST, Palaiseau, France
2017/2018	M2 - MVA (Mathematics, Vision, Learning)
	École normale supérieure Paris-Saclay, Cachan, France
	Mention: Très bien
June 2017	Degree in Mathematics
	Yerevan State University, Yerevan, Armenia
	GPA: 20/20
June 2013	High-school degree
	PhysMath school after A.Shahinyan, Yerevan, Armenia

Conferences, Talks, Workshops

2020 December	Meeting in Mathematical Statistics | **Talk**
2020 December	33-rd Neural Information Processing Systems | **Poster**
2020 July	Joint Structures and Common Foundations of Statistical Physics, Information Geometry and Inference for Learning (SPIGL'20) , Les Houches, France | **Poster**
2020 March	Optimization for Machine Learning, Luminy, France
2019 December	Meeting in Mathematical Statistics, Luminy, France
2019 April	Seminar at Télécom ParisTech, Paris, France | **Talk**
2019 April	8èmes Rencontres des Jeunes Statisticiens (RJS 2019), Porquerolles France | **Talk**
2019 March	YES X : "Understanding Deep Learning: Generalization, Approximation and Optimization", Eindhoven, Netherlands, **Poster**
2016 July	3rdSummer school "Mathematics and Applications", Tsaghkadzor, Armenia
2015 Aug	Visiting Student Research Program "Applied Differential Equations" KAUST, Saudi Arabia
2015 July	2nd Summer school "Mathematics and Applications", Tsaghkadzor, Armenia
2014 July	1st Summer school "Mathematics and Applications", Tsaghkadzor, Armenia

Work Experience

Apr 2018 - Sept 2018	ENSAE/CREST
	Research intern supervised by A.Dalalyan
Jun 2017 - Aug 2017	Innovative Solutions and Technologies Center - ISTC
	Math trainer
Sept 2016 - May 2017	American University of Armenia
	Teaching Associate
Apr 2016 - Jul 2016	Mer Soft LLC.
	Internship in Medical Data Analysis

Research, Articles

Penalized Langevin dynamics with vanishing penalty for smooth and log-concave targets, Avetik Karagulyan, Arnak Dalalyan | Accepted to NeurIPS 2020.

Bounding the error of discretized Langevin algorithms for non-strongly log-concave targets, Arnak Dalalyan, Avetik Karagulyan and Lionel Riou-Durand | https://arxiv.org/abs/1906.08530

Non-Asymptotic Guarantees For Sampling by Stochastic Gradient Descent, Avetik G. Karagulyan | Journal of Contemporary Mathematical Analysis (Armenian Academy of Sciences) 54.2 (2019): 71-78

User-friendly guarantees for the Langevin Monte Carlo with inaccurate gradient, Arnak S. Dalalyan, Avetik G. Karagulyan | Stochastic Processes and their Applications 129.12 (2019): 5278-5311.

Existence of positive solutions for an approximation of stationary mean-field games, Diogo Gomes et al. | Involve, a Journal of Mathematics Vol. 10 (2017), No. 3, 473–493

Achievements and Awards

Silver Medal	IMC 2017 Blagoevgrad, Bulgaria
Bronze Medal	IMC 2016 Blagoevgrad, Bulgaria
Silver Medal	IMC 2015 Blagoevgrad, Bulgaria
Gold Medal	2017, Awarded by Yerevan State University
	For high academic performance and participation in olympiads
"Best Student of Faculty"	2015, Awarded by Yerevan State University
Honourable Mention	IMO 2013 Santa Marta, Colombia
Honourable Mention	IMO 2012 Mar del Plata, Argentina
Semi-finalist	ACM-ICPC 2015 Tbilisi, Georgia
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Semi-finalist	ACM-ICPC 2013 Tbilisi, Georgia
2ND Prize	Mirror of William Lowell Putnam Mathematical Competition 2016
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Languages

Armenian:	Native or bilingual proficiency
English:	Full professinal proficiency
Russian:	Full professional proficiency
French:	Professional working proficiency