Adil Salim

Ph D Student



Education

2015–2018 **Ph.D**, *Telecom ParisTech*, Paris, Stochastic optimization for machine learning. Supervisors: Pascal Bianchi, Walid Hachem and Jérémie Jakubowicz

2014–2015 **M.Sc**, *Paris XI University*, Orsay, Probability Theory and Stochastic Modeling. Magna cum laude

2012–2015 M.Sc, ENSAE ParisTech, Malakoff, Data Science and Statistical Engineering.

2009–2012 **Preparatory Classes for the "Grandes Ecoles"**, *Lycée Lakanal*, Sceaux, Mathematics/Physics.

Three-year undergraduate intensive course

2009 **Baccalauréat Scientifique**, *Lycée Mistral*, Fresnes, Spe. Math. Highest honours + Merit scholarship

Teaching

2015-2017 Tutorial assistant, ENSAE ParisTech, Malakoff, 128h.

Algebra, Measure Theory, Introduction to Stochastic Processes, Applied statistics project: French presidential elections, Twitter graph and Markov chains

Experience

March 2018 **Visiting scholar**, *EPFL*, Lausanne, Laboratory for Information and Inference Systems (LIONS).

Host: Volkan Cevher

2012-2017 **Member of the Teaching Pole**, *Nonprofit organizations*, Paris, Coaching ambitious students from rough urban area to prepare competitive exams for the most prestigious schools in France.

Organizations : Renovo, Connex'cités, Gics, Prémices

Fall 2015 Data scientist, The Price Hub.com, Paris, Rough costing of industrial custom parts.

Summer 2015 **Data scientist**, *Kwanko*, Bourg-la-Reine, Real Time Bidding algorithm on Google Ad Exchange.

Summer 2015 **Master thesis**, *CREST-ENSAE*, Malakoff, Free stochastic calculus and large random matrices

Supervisor: Philippe Biane

- Summer 2014 **Internship**, *Insight-UCD*, Dublin, Importance sampling, MCMC methods. Supervisor: Florian Maire
- Summer 2013 Auditor, Deloitte, Neuilly-sur-Seine, Audit of banks and insurance companies.

Publications

- [1] A. Salim, P. Bianchi, and W. Hachem. "Snake: a Stochastic Proximal Gradient Algorithm for Regularized Problems over Large Graphs". *Nips 2017 Workshop Black in Al.*
- [2] R. Mourya, P. Bianchi, A. Salim and C. Richard. "An adaptive Distributed Asynchronous Algorithm with Application to Target Localization". *IEEE CAMSAP* 2017.
- [3] P. Bianchi, W. Hachem and A. Salim. "Convergence d'un algorithme du gradient proximal stochastique à pas constant et généralisation aux opérateurs monotones aléatoires". *GRETSI 2017*.
- [4] A. Salim, P. Bianchi, and W. Hachem. "Snake: a Stochastic Proximal Gradient Algorithm for Regularized Problems over Large Graphs". *CAp 2017*.
- [5] A. Salim, P. Bianchi, and W. Hachem. "A Stochastic Proximal Point Algorithm for Total Variation Regularization over Large Scale Graphs". *IEEE CDC 2016*.
- [6] A. Salim, P. Bianchi, and W. Hachem. "A Constant Step Stochastic Douglas-Rachford Algorithm with Application to Non Separable Regularization". Submitted, October 2017.
- [7] A. Salim, P. Bianchi, and W. Hachem. A constant step stochastic Douglas Rachford algorithm. *Technical Report*, October 2017.
- [8] A. Salim, P. Bianchi, and W. Hachem. Snake: a Stochastic Proximal Gradient Algorithm for Regularized Problems over Large Graphs. ArXiv e-prints, 1712.07027, December 2017.
- [9] P. Bianchi, W. Hachem and A. Salim. A constant step Forward-Backward algorithm involving random maximal monotone operators. ArXiv e-prints, 1702.04144, February 2017.
- [10] P. Bianchi, W. Hachem, and A. Salim. Constant Step Stochastic Approximations Involving Differential Inclusions: Stability, Long-Run Convergence and Applications. ArXiv e-prints, 1612.03831, December 2016.