

# CHEIK TRAORÉ

PhD candidate, Università di Genova  
Via Dodecaneso 35, 16146 Genova GE, Italy  
Email ◊ cheiktraore.com ◊ Google Scholar ◊ Github

## EDUCATION

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<b>PhD in Mathematics and Applications</b> Marie Skłodowska-Curie Actions Doctorate Fellow Università degli Studi di Genova, Italy Supervisors: Silvia Villa, Saverio Salzo	<i>November 2020 - ?? 2024</i>
<b>MSc in Mathematics, Vision, Learning</b> École Normale Supérieure Paris-Saclay, France Thesis: <i>Convergence of the iterates generated by AdaGrad</i> Supervisor: Édouard Pauwels	<i>October 2019 - September 2020</i>
<b>MSc in Mathematical Sciences</b> African Institute for Mathematical Sciences, Senegal Thesis: <i>Reciprocal job recommender system</i>	<i>August 2016 - February 2018</i>
<b>Maitrise in Applied Mathematics</b> Université Nazi Boni, Burkina Faso	<i>October 2014 - September 2015</i>
<b>BSc in Fundamental Mathematics</b> Université Nazi Boni, Burkina Faso	<i>October 2013 - September 2014</i>

## AWARDS AND HONORS

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<b>Marie Skłodowska-Curie Actions Doctorate Fellowship</b>	<i>2020</i>
<b>Mastercard Foundation Scholarship</b>	<i>2016</i>
<b>Burkina Faso National Scholarship</b>	<i>2008</i>

## PUBLICATIONS

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### PREPRINTS *(under review)*

- [1] TRAORÉ, C., APIDOPOULOS, V., SALZO, S., AND VILLA, S. (2023). Variance reduction techniques for stochastic proximal point algorithms. *arXiv preprint arXiv:2308.09310*

### ARTICLES IN PEER-REVIEWED JOURNALS *(accepted or published)*

- [1] TRAORÉ, C., SALZO, S., AND VILLA, S. (2023). Convergence of an Asynchronous Block-Coordinate Forward-Backward Algorithm for Convex Composite Optimization. *Computational Optimization and Applications*, 86(1), 303-344

- [2] TRAORÉ, C., AND PAUWELS, E. (2021). Sequential convergence of AdaGrad algorithm for smooth convex optimization. *Operations Research Letters*, 49(4), 452-458

## INVITED TALKS

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**20th EUROpt Workshop on Continuous Optimization** *August 2023*

Session: Stochastic methods / Stream: First-order optimization methods

Title: *Asynchronous block coordinate Forward-Backward*

Budapest, Hungary

**SIAM Conference on Optimization (OP23)** *June 2023*

Mini Symposium on Randomized Methods for Linear Systems: Row-Action  
and Coordinate Descent

Title: *Asynchronous block coordinate Forward-Backward*

Seattle, United States

**Second Conference of Young Applied Mathematicians** *September 2022*

Session: Machine Learning and Statistics

Title: *Asynchronous block coordinate Forward-Backward*

Arenzano, Italy

**International Conference on Optimization and Decision Science** *August 2022*

Session: Optimization for machine learning

Title: *Asynchronous block coordinate Forward-Backward*

Florence, Italy

**SIAM Annual Meeting (AN22) (online)** *July 2022*

Mini Symposium on Algorithmic Advancements for Computing on  
Distributed Systems

Title: *Asynchronous block coordinate Forward-Backward*

Pittsburgh, United States

## ACADEMIC AND RESEARCH ACTIVITIES

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### REVIEWS *(since 2021)*

Journal of Machine Learning Research

SIAM Journal on Imaging Sciences

## MISCELLANEOUS

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**Research intern**

Worked with Édouard Pauwels  
Université Toulouse III - Paul Sabatier, France

*April 2020 - October 2020*

**Web developer**

Wutiko SAS, Senegal

*February 2018 - September 2019*

**Graduate intern**

Wutiko SAS, Senegal

*May 2017 - October 2017*

**Temporary mathematics teacher**

High Schools in Burkina Faso

*September 2010 - June 2013*