DAVID CHEIKHI

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EDUCATION

Columbia Business School, Columbia University, New York, NY — Sep 2021 - Current

PhD Candidate in the Decisions, Risk and Operations (DRO) division, adivsed by Prof. Dan Russo.

Columbia University, New York, NY — Sep 2019 - Dec 2020

Master of Science in Computer Science - Machine Learning Track

Dynamic programming, Machine Learning Theory, Graphical models, Optimization

Ecole polytechnique, Paris, FR — Sep 2016 - Jul 2019

- Master of Science in Applied Maths and Computer Science - Operations Research Track

  Operations Research, Mathematical Programming, Randomized Algorithms
- Bachelor of Science in Applied Maths and Computer Science

  Probability, Statistics, Stochastic Process, Algorithm Design, Complexity Theory

Lycée Henri Poincaré, Nancy, FR — Sep 2014 - Jun 2016

Competitive undergraduate program in mathematics, physics and computer science

Algebra, Differential calculus, Discrete Probability

RESEARCH

On the statistical benefit of intermediate outcomes in long-term optimization , — Working paper
with Prof. Daniel Russo, Columbia DRO Deptartment

Stochastic Flows and Geometric Optimization on the Orthogonal Group, — ICML 2020
Krzysztof Choromanski, David Cheikhi, Jared Davis, Valerii Likhosherstov, Achille Nazaret, Achraf Bahamou, Xingyou Song, Mrugank Akarte, Jack Parker-Holder, Jacob Bergquist, Yuan Gao, Aldo Pacchiano, Tamas Sarlos, Adrian Weller, Vikas Sindhwani

WORK EXPERIENCE

Google, Paris, FR — May 2020 - Oct 2020
Research Software Engineer Intern - Operations Research

- Building a dataset and a model predicting the latency of the Vehicle Routing solver — *C++, Python*
- Enabling a better scheduling of instances
- Leading to a better understanding of how features impact the solve time

Google, Paris, FR — Apr 2019 - Aug 2019
Software Engineer Intern - Operations Research

- Designed an algorithm to split large constrained Vehicle Routing problem instances — *C++*
- Enabled to solve significantly larger instances by splitting them first

Google, London, UK — Jun 2018 - Aug 2018
Site Reliability Intern

- Creation of a pipeline to get data from the servers — *GoLang*
- Calibration of models to compute a unite of measurement of hardware performance — *Python*

TEACHING EXPERIENCE

Columbia Business School, Columbia University, New York, NY — Oct 2020 - Dec 2020

- TA: Managerial Statistics (MBA core), *Fall 2022*

- TA: Sports Analytics (MBA elective), *Summer 2022, Fall 2022*

SEAS School of Engineering, Columbia University, New York, NY

- Teaching Assistant: Analysis of Algorithm, *Fall 2020*
- Teaching Assistant: Randomized Algorithms, *Fall 2019*

Science Ouverte (Open Science), Drancy, FR   Sep 2016 - Apr 2017
Intern
- Science Ouverte is an association which promotes science in high priority education area
- Teaching science to primary school, middle school, high school and undergraduate students
- Creation and animation of science popularization activities

France-IOI, Paris, FR   Sep 2016 - Present
Volunteer coach
- Volunteer coach in algorithmic boot camp for high school students