# Samer Said

#### Financial Engineer



34 Victor Basch street 91300 Massy, France



06 11 19 82 08



samer.said@polytechnique.edu

## Langues –

• Arabic : Native • French: Bilingual

• English : Advanced [TOEIC

910/990]

## Software ———

- C/C++
- Python
- Matlab
- Microsoft Excel
- Visual Basic pour Applications (VBA)
- Bloomberg

# Scientific disciplines

- Statistical learning
- Stochastic calculus
- Monte-Carlo methods
- Differentiable optimization
- Portfolio Management
- algorithmic trading
- Numerical methods in financial engineering
- Valuation and coverage of derivative products
- Risk management and measurement
- Machine learning for finance

# Interests and Com-munity life

- •Senior member in the club MINDS | TA (2016-2018)
- Active member in the Tunisian Cultural Exchange Association ATACJL
- Traveling, Playing and watching football

#### Education

2018-2019 Master 2 Statistics & Finance

ENSAE Paris - Polytechnique X

• Courses: Market Finance, Risk Management, Pricing Derivatives, Algorithmic Trading, Statistics and Machine Learning.

2016-2019 Engineer's degree in Applied Mathematics

• Courses: Financial Mathematics, Stochastic Calculus, Markov Chains, Financial Regulation, Credit Derivatives, Models of Regression, Time Series, Differentiable Optimization.

2014-2016 • Preparatory Cycle Mathematics-Physics

**IPEIT** Degree of completion of the preparatory cycle, rank: 18/2200.

2010-2014 Secondary School

Pioneer high school of Sousse

• Baccalaureate degree, Mathematics - High honors.

#### Experiences

June 2019 Internship (6 months)

Quantitative Analyst at CA-CIB / MQP Team

- Participation in the modeling of LGD and PD risk indicators.
- Development of the library of existing models in R (Automation of internal procedures).
- Execution of the stress tests on the collateral (deposited in guarantee of the credits of the group) and analysis of the results.
- Improvement of existing models for valuing maritime assets using advanced statistics and machine learning techniques.
- Implementation of the modeling tool tests and analysis of the sensitivity to the parameters.

May 2018 Research internship (3 months) Louis Bachelier Institute

- Model the forecast error of the net electricity consumption in metropolitan France using the language R.
- Estimate the cost of volatility of intermittent production (wind generation) on the day-ahead electricity markets by econometric mod-

July 2017 Worker internship (1 month) LEONI wiring systems

• Department of method and quality service.

Realized project: Monitoring a production line (reducing waste, optimizing chain's ergonomics, improving efficiency).

## Academic Projects

2019 Valuation of an American option (3 months)

- Estimate the price of the American option using the Longstaff-Schwartz method under Matlab and R.
- Estimate the price of the American option using the Finite Difference method under Matlab, solving the partial differential equation that the price satisfies.

2018 Valuation of an Asian option (2 months)

**ENSTA Paris** 

- Estimate in C++ the price by the Turnbull & Wakeman approxima-
- Estimate in Matlab the price by the Monte Carlo method based on the model B&S.
- Study the influence of the time step used, the volatility and the interest rate on the price.

2018 Stock exchange simulation (3 months)

• Transactions modeling in c++ (buy, sell, keep, etc.) within the stock market.