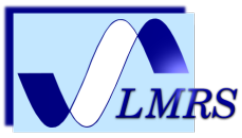

Internship report M1 (2A ENSIIE)

Title / subject of the internship

Your name here

Internship carried out from xx/xx/20xx to xx/xx/20xx

Internship tutors : M. xxx

Referent teacher : M. xxx

Éducational institution : Université Paris-Saclay / ENSIIE - M1 Maths Appliquées

Internship host company : LMRS - Av. de l'Université, BP.12, 76801 Saint-Étienne-du-Rouvray

Acknowledgments

Say something here.

Abstract

Write an abstract here.

Key words: financial models, machine learning...

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2.1.1.1 You can add a figure like this: 1

2.1.1.2 You can also add an equation: 1

2.1.1.3 Moreover, you can add a table: 1

2.1.1.4 These things can be cited as below: 1

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1 Introduction

Put and call options are important in finance.

2 Work environment

2.1 The host company

2.1.1 Different functionality

2.1.1.1 You can add a figure like this:

Fig. 1: (Put a figure description here.)

2.1.1.2 You can also add an equation:

$$dS_t = \mu S_t \mathrm{d}t + \sigma S_t \mathrm{d}B_t, \tag{1}$$

and explain it:

- t: temps, en années ;
- S_t: prix de l'actif sous-jacent S à l'instant t ;
- B_t: un mouvement brownien à l'instant t ;
- μ : drift de S ;
- σ : la volatilité (constante) du sous-jacent.

2.1.1.3 Moreover, you can add a table:

Méthode	Temps de calcul (en s)	Prix de call
line 1	1	2
line 2	1	2
line 3	1	3
line 4	1	9

Tab. 1: Performance des méthodes de pricing du modèle de Heston

2.1.1.4 These things can be cited as below:

The Fig.1 used the equation (1), and turned out the results as shown in Tab.1.

2.2 The host team

3 (General problematic statement)

4 (Your contribution)

4.1 State of the art

4.2 Tools or conception used

4.3 Realisation

4.4 Results and discussion

5 Conclusion et perspectives

[Ros58]

References

[Ros58] Frank Rosenblatt. "The perceptron: a probabilistic model for information storage and organization in the brain." In: *Psychological review* 65.6 (1958), p. 386.

Glossary

C | **P**

C

call call option is 1

P

put A put option in finance is...). 1

A Annexe DD&RS

A.1 Sustainable Development

A.2 Social Responsibility