Temple University, Department of Computer Science
CIS 4360 Computational Methods in Finance
Fall 2023
Instructor: Dr. Alex Pang

Project 3

Student Name:

due date:

Overview

The goal of the third project is to implement the Black-Scholes Model. In particular, you will implement a model class to calculate the fair value of a call and put option. You will also implement the put-call parity and also all the greeks of a option.

The project will be done independently. I will provide code and notebook template as a starting point.

Tasks

1. Download financial_option.py and blackscholes_model.py. Fill in all the missing code in the blackscholes_model.py script.

2. Download BlackScholesModel.ipynb notebook. Answer all the questions listed in the notebook. If your implementation is correct, your model price should match with the Example 15.6 from the textbook which is also included in the notebook.

Check list of what you need to submit

Zip all of the following and submit them as a single zip file.

1. The python script, financial_option.py, blackscholes_model.py

2. BlackScholesModel.ipynb

Rubric

Your work will be graded based on Correctness, Completeness and Elegance. Make sure your code has enough comments.