

# Artificial Intelligence in Algorithmic Trading: An Extended Guide

## Overview

This document is a minimal example using EB Garamond for prose and libertinus math for formulas. Links like this one are active.

## Math sample

Let  $S_t$  follow a geometric Brownian motion:

$$dS_t = \mu S_t dt + \sigma S_t dW_t, \quad \Rightarrow S_T = S_0 \exp\left((\mu - \frac{1}{2}\sigma^2)T + \sigma\sqrt{T}Z\right).$$

The Black–Scholes call price:

$$C = S_0 e^{-qT} \Phi(d_1) - K e^{-rT} \Phi(d_2), \quad d_{1,2} = \frac{\ln(S_0/K) + (r - q + \frac{1}{2}\sigma^2)T}{\sigma\sqrt{T}}.$$

This is how the stats operator, like the expected value, variance, and other math functions, look like with the selected font:

$$\mathbb{E}[X], \quad \mathbb{V}[X], \quad \mathbb{P}(X \in A) \int f(x) dx, \quad \frac{d}{dx}f(x)$$

## Text sample

EB Garamond provides a humanist texture suitable for long-form reading. For tables or code listings, load only the packages que realmente uses.