

# EcxAx Library

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## 1 Introduction

This document describes the methodology used by the EcxAx library.

## 2 Mathematical Foundations

### 2.1 Statistics

In the discrete world, given a random variable  $X$ , we can define the following operators:

$$\mathbb{E}[X] = \sum_{x \in X} x \mathbb{P}[X = x] \quad (1)$$

### 2.2 Time Series

A time series is a collection of data sorted, usually by date.