Introduction

Introduction to the MTGA

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Academic History

- 1980 Born in Sao Luiz, Brasil
- 2005 Moved to Japan to study at the University of Tokyo
- 2007 Concluded the Master Degree in Computer Sciences at the University of Tokyo, in Iba Laboratory
- 2010 Concluded the PhD Degree in Computer Sciences at the University of Tokyo, in Iba Laboratory
- 2011 Researcher at the Federal University of Rio de Janeiro, Brazil
- 2012 Assistant Professor at University of Tsukuba

Research Interests

2007-2010: Financial Portfolio Optimization

Studied portfolio Weight optimization in my PhD in University of Tokyo

2011: Medical Data

Clustering of Medical data at Federal University of Rio de Janeiro

2012-2014: Seismic Modeling

Modeling of Seismic Events using Evolutionary Algorithms at Tsukuba University

Introduction

Today, we will talk about methods for parameter selection in financial engineering problems.

What we will discuss today

- What is optimization;
- When the property of the pr
- Evolutionary Algorithms a type of optimization;
- MTGA Evolutionary Algorithms for Portfolio Weight Selection;

Disclaimer

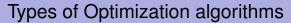
This presentation describes an stochastic optimization algorithm for parameter tuning. Stochastic methods are by nature **random**.

We do not guarantee any results from using the algorithm presented today.

Results depend on the implementation and the restrictions that apply to each problem. Please consult with your engineers before using this software.

What is Optimization

Optimization in Financial Portfolios



When do we want to use each optimization type?

Introduction

What are Evolutionary Algorithms?

Evolutionary Algorithms and Random Search

Outline

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Time For questions