Computational Finance Spring 2021
Video lectures on Youtube

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These lectures are based on the book *Mathematical Modeling and Computation in Finance* by Kees Oosterlee and Lech Grzelak. There is also a companion website with solutions to selected exercises and a lot more.
The slides of the lectures and python code have been made available on the Computational Finance page of Lech's github page.

The video lectures, all on *YouTube*, are the following.

- Lecture 1/14: Introduction and Overview of Asset Classes
- Lecture 2/14: Stock, Options and Stochastics
- Lecture 3/14: Option Pricing and Simulation in Python
- Lecture 4/14: Implied Volatility
- Lecture 5/14: Jump Processes
- Lecture 6/14: Affine Jump Diffusion Processes
- Lecture 7/14: Stochastic Volatility Models
- Lecture 8/14: Fourier Transformation for Option Pricing
- Lecture 9/14: Monte Carlo Simulation
- Lecture 10/14: Monte Carlo Simulation of the Heston Model:
- Lecture 11/14: Hedging and Monte Carlo Greeks
- Lecture 12/14: Forward Start Options and Model of Bates
- Lecture 13/14: Exotic Derivatives
- Lecture 14/14: Summary of the Course