Write your Master Thesis at SEB!

“Deep Learning in Algorithmic FX Trading”

Background

Time series analysis has significance in econometrics and financial analytics but can be utilized in any field, where understanding trends is important to decision making and reacting to changes in behavioural patterns. In finance, time series analytics is used for financial forecasting of fixed income, foreign exchange, equity and commodities. Algorithmic trading models have long leveraged supervised learning models to perform univariate forecasts. Such models have been used for decades and are well understood. However, with the rise of machine learning and, more recently, deep learning methods, other models are being explored and utilized, either to support or replace them.

About the assignment

You will be located in the high intensive environment on Scandinavia’s largest trading-floor and be part of a team that is responsible for the developing and maintaining models for algorithmic high-frequency FX trading. Your colleagues are all experts with degrees in the STEM field, several of which are PhDs. You will have the opportunity to learn the FX-market and work with big data and machine learning techniques. You will be part of the dedicated team which together with the assigned supervisor will guide you through your thesis work. Parts of the thesis or its findings might be submitted to scientific journals.

Who are you?

We are on the lookout for student(s) with a profound interest in data science, deep learning and artificial neural networks.

You are humble about the task at hand and you work independently to find solutions to arising problems but never afraid to ask for help when needed. You are familiar with the various machine learning techniques, such as clustering, classification and regression methods, deep- and reinforcement learning.

Qualifications

- Enrolled in a master's degree program in math, sciences, engineering, computer science or other quantitative fields
- No prior experience in financial markets required
- Core expertise in data science and machine learning
- Mastery of advanced Machine Learning / Data Science theory, techniques and tools
- Solid programming experience with one or more of Python, R, Matlab, Java, optionally C++
- Experience in the following standard packages is a merit, Tensorflow, Keras, numpy, pandas, scikit, CUDA
- Excellent analytical, quantitative and problem solving skills and demonstrated research ability

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Welcome to apply

Attach your CV and a personal letter describing yourself and how you can contribute to SEB. We accept teams of two working together, please then apply separately but refer to your partner in the application. Since we select candidates on running bases, feel free to send in your application today, but no later than 2017-11-30. If you have questions please contact

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