BACKGROUND
Trading in general is becoming automatized using algorithms, one example is robot advisors for stock or fund selection. Of particular interest is the global 5 trillion USD/day currency market, nowadays accessible from freely downloadable software. Even though this software has some support for algorithms, the level is not very high since its purpose is mainly traditional manual trading.

DESCRIPTION
The starting point is the trading algorithms that we have created already and optimized using historical data. We now want to make these more efficient using machine learning and AI. Steps in this process include database creation, fuzzy logic trading, Monte Carlo simulations and a controlling feedback loop that self-optimizes the system depending on the market conditions.

EXPECTATIONS
We expect students to learn how trading works in practice and then apply that knowledge to design an intelligent automatic trading system. There is of course a lot of articles and books on the subject, but emphasis is on components that work in actual trading.

STUDENT PROFILE
Experience of Python and R is an advantage, as well as an interest in trading on financial markets. Experience of forex trading is of great merit. This project suits students with good analytical and problem solving skills. A successful master thesis will be a major advantage as to financial job applications or as a starting point for your own company.

OUR COMPANY
First to Know Scandinavia AB, Hugo Grauers gata 3B, 411 33 Gothenburg

CONTACT INFORMATION
Ola Ekman, Managing Director, ola.ekman@firsttoknow.se
Mobile: 0705-28 14 88
Fredrik Wallinder, PhD Physics, Tech Specialist, fredrikwallinder@gmail.com, mobile: 0723-238 555

ABOUT US
Ola Ekman has a long experience of business development and student supervision at Chalmers and School of Evonomics Law at Gbg University. His model of collaboration between academia and companies has earned substantial interest.
Fredrik Wallinder has a long academic experience with a PhD in astrophysics at Lund university, post-doc experience, research at Harvard and teaching physics and astrophysics to undergraduate and graduate students and the general public. He has supervised several master students at Örebro university.