



We are [CryptoAi](#) - a systematic hedge fund start-up specializing in the modeling of cryptocurrency markets using custom made machine learning models. We're currently seeking new partners with expertise in:

- Trading systems / algorithmic trading strategies
- Feature engineering and cryptocurrency domain knowledge

Who we are and what we have accomplished

We are a four man team composed of two model architects, (each of whom holds a PhD in artificial intelligence,) a trading systems architect (currently the owner of a bitcoin exchange, and a former wall street developer), and a networker / marketer who holds a bachelor's degree in physics. We formed ourselves in the spring of 2014, with the objective to become a lead player in the cryptocurrency alternative investment space by providing professionalism, credibility and long term value, as well as sustained returns to our stakeholders.

Our system architect joined the team in December 2015. Since then he has implemented a trading framework and we are currently trading live with the signal from our primary model with consistent positive returns.

We recently launched an [ICO on the NXT asset exchange](#), successfully selling out in 3 days with \$25,000 raised in funding.

Future goals can be seen in the 'Milestones for the Future' section of our [business plan](#).

Our Tech stack is built on top of a distributed messaging setup with multiple strategies and trading bots sourcing data for our models. We primarily use java for our core components and exchange gateways, while our models are mostly coded in python. We are seeking out partners with complementary skill sets, preferably good core java knowledge and a broad based understanding of common web technologies. Experience with CEP frameworks (such as Esper,) and a general understanding of machine learning techniques and trading fundamentals would also be desirable.

Tasks we are recruiting members to work on

Trading system enhancement data capture and strategy development

Accurate and timely data is critical to our models, while in back testing we are often able to produce hypothetical profits, the ability to quickly capture the relative performance of a strategy is critical to us. More work is required in this area.

Our current trading strategies are still simplistic, while multiple, more advanced strategies can easily be developed and incorporated into our trading system for evaluation and improved performance.

Currently our system works in 3 stages:

- Interpret the signal from the model
- Generate a trading signal
- Select a strategy to execute an order

The trading framework has been designed with flexibility in mind. With the capacity to quickly apply multiple strategies in response to changing market conditions and take into account signals from multiple models as and when they are refined.

Applicant Specification

Be experienced and/or knowledgeable in:

- Systematic trading
- Trading strategies, order execution and market behaviour
- REST Based Exchange APIs
- Java Core, Esper CEP
- RabbitMq messaging, Websockets, HTML, Javascript, git
- OO Programming, State machines Python AWS, Linux Ubuntu

Feature Engineer

Knowing what data to feed into our models is essential. Currently, our primary model uses TA-lib (a library of 150 TA indicators) as it's features. A custom feature may be anything that could lead the model to discover correlations between the features output and price, whether it be relating to TA, social media, the network, order books etc.

The indicators (features) must produce a quantifiable value on a particular time frame (currently daily) and have historical data so their performance can be backtested. The features designed will be used as inputs in various machine learning models in order to forecast crypto markets.

Applicant Specification

Be experienced or knowledgeable in:

- Extensive domain knowledge of crypto networks
- Analytics of crypto markets (altcoins)
- Feature / custom indicator design for machine learning
- Web scraping, data analytics, familiarity with API of various crypto coins
- Agile software development (CI, TDD, Scrum)
- Object Oriented Programming

Bonus specifications

- Hedge fund operation
- Natural Language Processing

Additional Info

- We are partners who can start as soon as possible
- We are offering equity in the company for the filled position
 - We are not offering a salary

If interested in either position, or if you would like to hear more about our company please contact us directly via the details below ([or use the contact form on our website](#)). //

Yours sincerely
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