



BANCA

The Wall Street on Blockchain

A Cryptocurrency Investment Bank Community based on AI and Big Data

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1.INTRODUCTION TO banca

Investment banking, after over a hundred years of development in Wall Street, has gradually reached the top of the food chain of the financial industry. Goldman Sachs, Morgan Stanley, JP Morgan, Bank of America, Merrill Lynch and other titans of industry are synonymous with global financial elites and serve as one of the core strengths of the U.S. as a world superpower on an international scale. Global investment banks receive trillions of dollars in financing for businesses each year, and through their asset management, investment consulting and securities research reports, dominate the allocation of money amongst global investors.

However, the collapse of Lehman Brothers in 2008 precipitated a global financial crisis that plunged the U.S. into the abyss. Many were under the impression that investment banks that were “too big to fail”, and looking to satisfy their unilateral interests, guided investors into over-investing in real estate-related assets while taxpayers and investors around the world paid the bill for their greed. After the crisis, people began to reflect on the significance of investment banks in the economy. New policies limited borne risks and the requirement for capital increased in the operation of investment banks, while individual investors tried to shift their assets to more independent asset management organizations. However, it was undeniable that with improved security, these changes weakened the positive support of investment banks for the economy. In addition, independent asset management organizations were at a disadvantage in acquiring and processing information compared with large investment banks, and may not have been able to allocate resources the most effectively as optimum allocation of resources requires a balance between centralized information processing and decentralized decision-making.

With this knowledge, Banca first put forward the concept of the community investment bank, aiming to solve the contradictions in the traditional investment bank and play a significant role in determining the new business model of the investment bank.

2.Banca an investment banking community concept

We define Banca as a decentralized, intelligent community investment bank. The technical implementation of Banca is based on three main lines: blockchain technology, artificial intelligence and big data processing.

2.1 Blockchain technology

The establishment of community investment banks is based on a business agreement, trust mechanisms and the reward system of blockchain technology. With the development of digital currency in the past few years, the basic underlying technology has been through some initial development. Blockchain technology is increasingly being applied to industries other than digital currency, which will bring a new vitality to all aspects of the real economy. The core of blockchain technology is decentralization, therefore it can effectively prevent all kinds of moral hazards caused by the centralized management of traditional investment banks, all while improving operational efficiency through collective wisdom and concerted efforts. With the further maturation of other supporting technologies, a subversive reform is imperative.

2.2 Artificial intelligence and expert system

We use artificial intelligence and expert systems to achieve the dynamic and efficient automated management of the Banca ecological chain. Automation can overcome human weaknesses, and greatly reduce the probability of errors in data collection, integration, and processing. It makes the community bank inherit the advantages of large investment banks in terms of information and talent resources, yet overcome any efficiency loss caused by excessive vertical and horizontal levels in the management of large institutions. Artificial intelligence has successfully replaced manpower in the management of different elements of the Internet, operating motor vehicles, visual identification and other areas, and will eventually be widely used in the financial field.

2.3 Big data analysis technology

We will integrate these experiences into the service provided by the Banca platform to communities, based on the practices of our team in the field of Big Data analysis. This will make investment banks in the community give more accurate recommendations of related service providers to the customer. They will also provide more useful data for specific customers to facilitate the ICO customer in more effective interfacing with buyer groups, and further promote the service efficiency of BANCA. This process can be continuously improved upon based on data gathered with AI technology.

In addition, we have created the tamperproof ICO project database based on the tamperproof data system of blockchain technology, by means of community audit. We've created the community platform to provide further assurance of the highest quality of ICO project interfacing, as well as enabling the community investment banks to become the best new choice for investors.

2.4 Comparison between banca and traditional investment banks

Traditional Investment Bank	Decentralized Community Investment Bank
<ul style="list-style-type: none">• Project screening is not transparent, and it is difficult for ordinary listed clients to get the chance of fair competition.• Investment banks allocate good opportunities to preferred clients who are beneficial to their own interests, profit maximization and ordinary investors rarely participate in high-quality investment.• Insider trading and market manipulation are common.• Direct contributors in the investment bank's ecological chain are often not rewarded.	<ul style="list-style-type: none">• Everyone can participate and play the role he or she is best at.• Decentralized, democratic decision-making, equal opportunities and fair competition.• Each project can be exposed, and reviewed by the market.• Ordinary investors can participate in the investment opportunities that used to be available to only a few. Contributors can directly get their reward that they deserve. Blockchain technology ensures that data, equity and transactions are in real record, is transparent, and cannot be tampered with.

3. Banca community

3.1 Division of banca community

Banca's decentralized community investment bank will cover almost all businesses of traditional investment banks, including four aspects: primary market, secondary market, OTC digital financial services and basic services.

3.2 Primary market

The primary market is responsible for the listing and underwriting of all kinds of digital currencies, and for the introduction of securitized digital assets after the maturity of the business, to make more investors willing to hold digital assets by improving their liquidity. In this process, evaluators in the Banca community are free to participate in project evaluation and point out the merits and demerits of the project from the respective points that they are experts in. In addition, the Banca system uses Internet resources to obtain information about the project side. Finally, artificial intelligence dynamically integrates all the data and forms the overall risk rating and classification of the project. After analyzing the final project classification and risk rating, the platform identifies the most appropriate investors, thus achieving fund linkage.

3.3 Secondary market

The secondary market corresponds to the research and asset management departments of traditional investment banks, and is responsible for the research and investment, rating and investment management of digital assets. These are also based on the decentralized decision-making system of the community groups. Service providers on the platform analyze the research, investment and rating. In the process of trading, clients can choose the service providers that they trust, or adopt the comprehensive opinions provided by the platform after big data processing to assist in the trading of digital assets. Investment management is divided into active and passive investment management. The former includes professional traders in the community who provide services in the form of purchasing products as required by clients. The latter includes some intelligent investment-following products,

3.4 OTC financial service division

The OTC financial service division covers some services derived from businesses in primary and secondary markets, including the design and pricing of derivatives, liquidity and risk management based on big data and artificial intelligence and digital assets trusteeship.

3.5 Basic service division

Basic services include legal consulting, accounting, auditing and compliance provided for project and investment sides.

The performance of all projects in primary and secondary markets will be continuously tracked on the platform, and kept in the database of digital assets as the basis for evaluating the performance of service providers. This performance evaluation system is intelligent and dynamic, affecting the platform's rating for service providers, as well as the distribution of revenue.

3.6 Participants of banca community

Classification of Community Participants

1. Project side: project seeking, listing, bond issuing, securitization of digital assets, risk management, auditing and other services
2. Business side: members providing listing planning and execution, research and investment, rating and risk management of digital assets and other services
3. Selling side: sales channel, sales team, investment club, etc.
4. Investor: purchasing direct-selling products on the platform
5. Technology provider: members supporting and managing the technology, system and data
Basic service side: legal affairs, accounting/auditing

4. Intelligent management of the banca community investment bank

Intelligent management is the base of the Banca community investment bank. With the team's experience in big data processing and artificial intelligence technology over the years, we have been able to achieve efficient platform management, effectively analyzing and processing information offered by service providers, project sides and investors on the platform to provide intelligent investment banking services for clients.

This intelligent management is reflected in the following aspects:

- Intelligent search allows users to quickly find accurate information and services
- Big data analysis provides ratings for each member's business level, professional skills and reliability
- Using intelligent agreements to automatically determine business terms
- Recording business data, generating reports automatically, open and transparent, tamper-resistant
- Continuous dynamic optimization of business processes via AI

At the same time, all the project performance data will be continuously tracked and entered into the database by us, becoming important material for artificial intelligence learning. As the first platform servicing investment bank businesses by using big data & artificial intelligence, Banca is at the forefront of the industry, and as time goes on, first-mover advantages will become more obvious.

5. Platform architecture and technical advantage

5.1 Platform's technical advantages

Compared with other projects, our team has unique technical advantages:

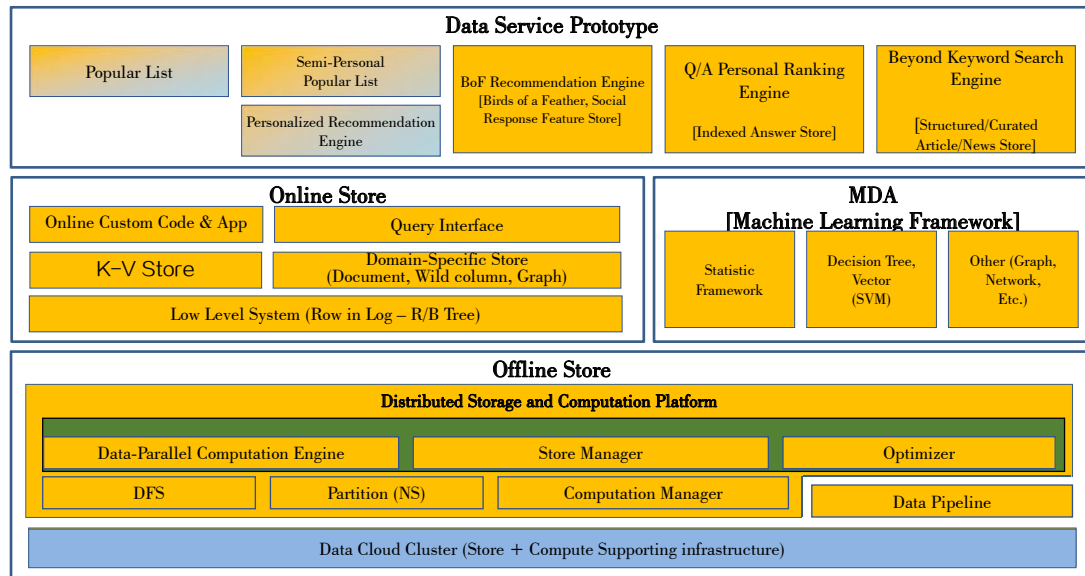
- Blockchain technology based on Big Data Framework
- Software-as-a-Service and blockchain as a service
- Risk control based on IN-DEPTH LEARNING and Recurrent neural network
- Smart and effective Search Engines
- Targeted Advertising services

The Banca system introduces a licensing mechanism based on the crowdfunding chain of consortium blockchain. The chain has the following technical features:

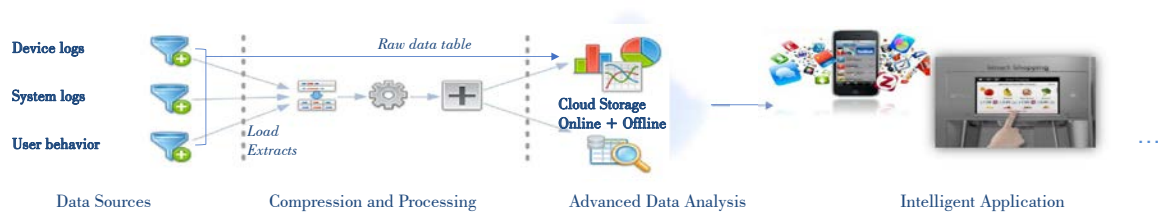
- Distributed fault – tolerance: the network is particularly robust, with fault tolerance at exception status of around 1/4 node.
- Tamper-proofness: the data after being submitted will be always available and it can not be destroyed or modified.
- Privacy protection: Cryptography guarantees unauthorized access to data, but the data cannot be parsed.

In terms of processing performance and scalability, every core node involved in the maintenance of the network must maintain a complete storage and process an intelligent agreement, therefore, the total storage and computing power of the entire network depends on a single node. The Banca system adopts Kafka stream processing and the Hadoop decentralized computing system and other big data technologies to ensure the throughput, low latency and high performance of transactions. In addition, in regards to the database and storage system, the Banca system uses a new, more specialized NoSQL key-value database, in which each record contains a complete block's information that is naturally associated with its historical information. The data cannot be modified once entered, thus the quality of the data transmission is guaranteed.

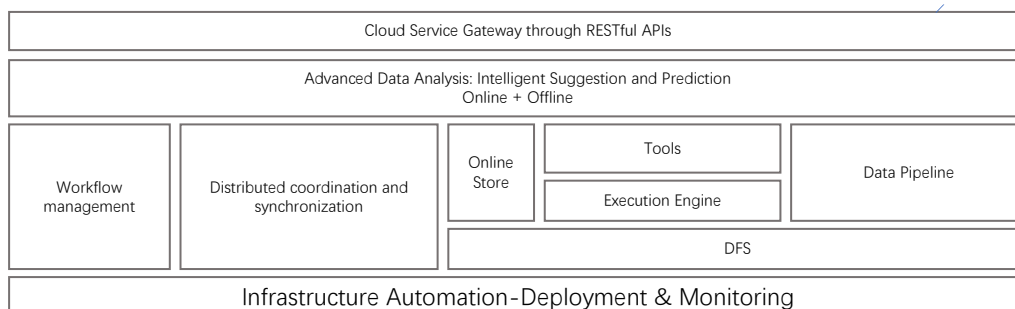
5.2 Platform architecture



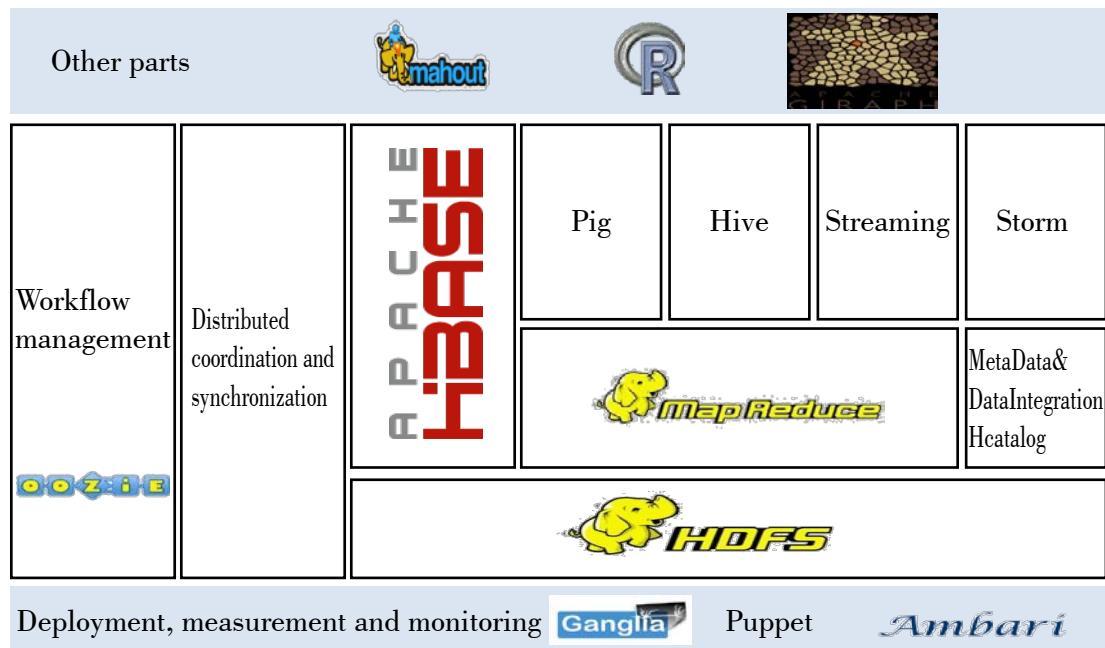
5.3 Data transmission pathway



5.4 Platform starting point



5.5 Technology stack



5.6 Blockchain system of the banca community

Blockchain has adopted the concept of “Proof of Work” to evade any malicious damage on the data, and use probabilistic models to ensure the longest legitimate chains. In addition, there are also pledges based on rights, such as PoS, DPoS and Casper. Theoretically speaking, these algorithms are based on the Game Theory, and ensure the corporation of the majority by incurring a monetary loss on those malicious participants. The technical support for Blockchain has entailed a distributed consensus mechanism, including the classic Byzantine algorithm.

In addition, in terms of performance and scalability, each node in the network maintains a complete storage and performs smart contract processing. As a result, the total storage and compute power of the entire network, depends on a single node. BANCA systems employ big data technologies such as Kafka streaming and Hadoop decentralized computing systems to ensure transaction throughput, low latency, and high performance. In addition, in terms of database and storage, the system uses a more targeted new type of NoSQL key-value database, in which each record will include a complete block of information and is naturally associated with the historical information, once written confirmation can not be modified, thus ensuring the efficiency and security of data transmission.

In addition, we have a concise and sophisticated smart contract based on blockchain: The so-called "smart contract" is a pre-edited digital language record terms - once triggered, the smart contract to implement the

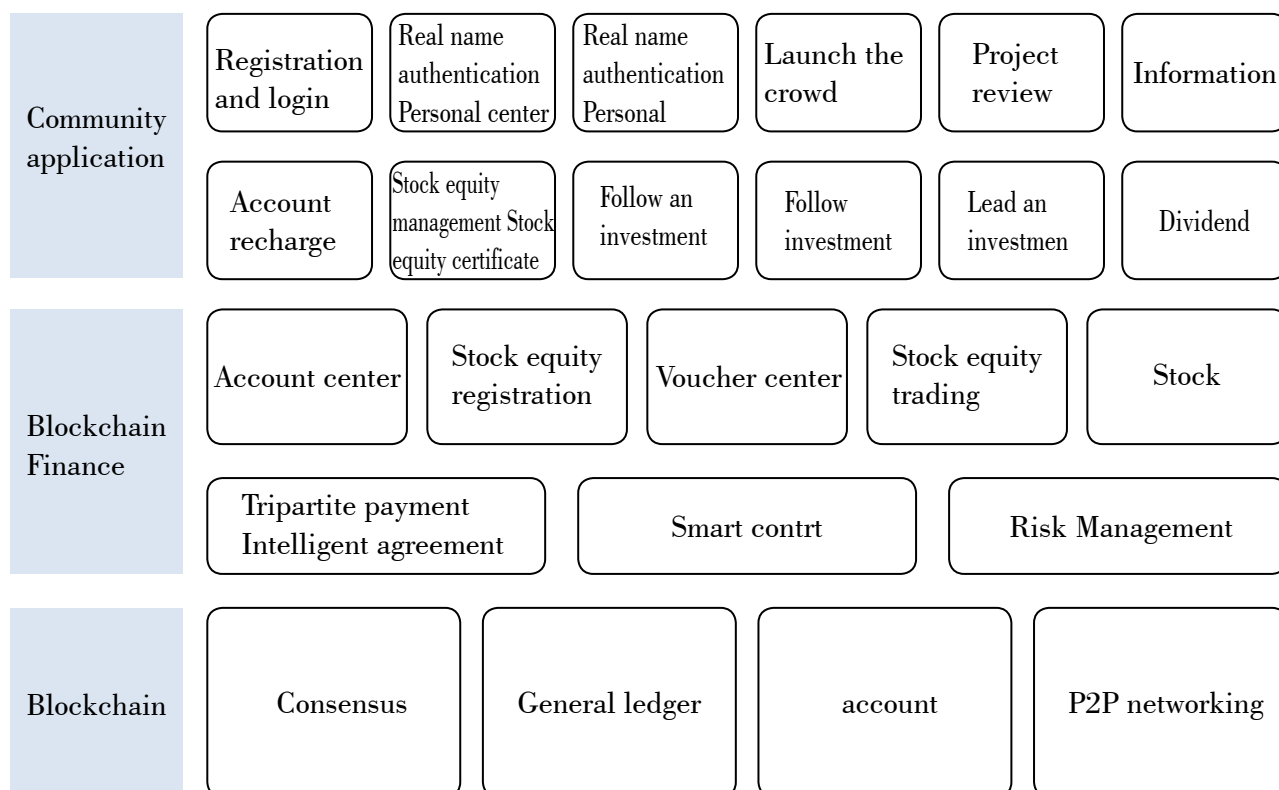
corresponding terms or record terms are executed. In simple terms, smart contracts are intelligent contracts that record specific terms in computer languages rather than in legal languages.

From a user's point of view, a smart contract is usually considered an automatic guarantee account. A traditional contract means that two or more parties agree to do something in exchange for something or not, each party must trust each other to fulfill their obligations, and smart contracts need not trust each other because the smart contract is not only defined by the code but also by the code Mandatory, completely automatic and uninterrupted. Smart contract system according to the event description information contains trigger conditions to decide whether to implement. When the trigger condition is satisfied, the smart contract automatically sends out a preset data resource and an event including the trigger condition. The existence of a smart contract is only intended to allow a complex set of digitized promises with triggering conditions to be properly implemented in accordance with the will of the participants. On one hand, in practice, a software agent performs certain obligations and may have control over certain assets in the shared ledger. Data such as stored in the blockchain, validation and implementation of the code, is defined as "smart contract code." On the other hand, it refers to the interpretation of how legal contracts are expressed and enforced in software and therefore covers areas of operation such as how to draft legal contracts and how to interpret them. He defines this type as a "smart legal contract."

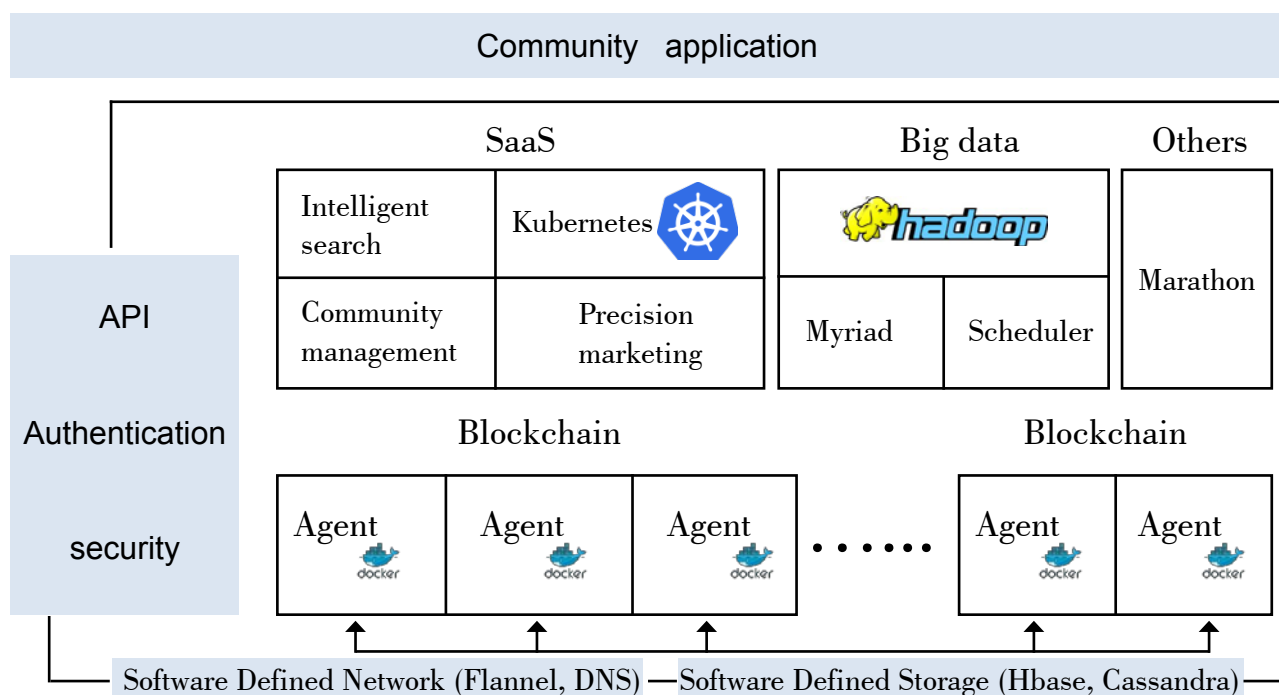
From a technical point of view, smart contracts are considered Web servers, except that instead of using IP addresses to set up on the Internet, these servers are set up on the blockchain so that specific contract programs can run on them. Smart contracts are deployed on shared, replicated books that maintain their status, control their own assets and respond to received outside information or assets. It is a computer program that runs on a replicable, shared book that processes information, receives, stores, and sends values. Smart contracts are collections of codes and data that are stored at the blockchain's specific address. Smart contracts are more like automated proxies (or robots or NPCs) in the blockchain that have their own account that automatically performs functions driven by time or events, such as the ability to pass information between themselves, modify the state of the blockchain (account information, etc.), and Turing complete calculation. The creation of Turing complete blockchain and IoT enabled smart contracts to safely and quickly transfer assets and interact with physical entities.

In essence, the working principle of smart contracts is similar to the program statements of other computer programs interacting with real-world assets through the execution of programs. Non-tamper-proof features based on blockchain, as well as automatic execution of smart contracts when conditions trigger, greatly ensure the credibility of smart contracts and reduce implementation costs and compliance costs. A smart contract is a set of promises that are defined numerically and include agreements on which contractual parties can implement those promises. The basic idea of a smart contract is that many contract terms can be embedded in hardware and software.

BANCA Community block chain system



Block chain system architecture.



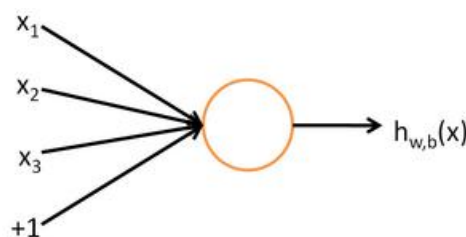
5.7 Banca Community artificial intelligence system

Technically speaking, intelligence includes two aspects:

Deep Learning and Recurrent Neural Network-Based Prediction Models: The system predicts accurate future movements of tokens by mining hidden information from historical transaction data and from deep behavioral records. The main goal of deep learning is to learn multi-level features and to create more abstract high-level representations by combining low-level features to discover the distributed representation of the data. By building a multi-layered Neural Network to simulate human brain learning process, we hope to use the human brain's multi-layer abstraction mechanism to achieve the abstract expression of the real object or data, and to integrate the feature extraction and classifier into a learning framework under. Deep learning structure feature is a multi-layer perceptrons with multiple hidden layers, forming more abstract high-level representation attribute categories or features by combining low-level features to find the data distributed feature representation. Multi-level abstraction is formed through bottom-up learning, and multi-level feature learning is a process that automatically intervenes without human intervention. According to the learned network structure, the system maps the input sample data to various levels of features and classifies the output units of the top level by using a classifier or a matching algorithm.

For some low-level algorithms, such as neural networks with single hidden layer, support vector machines, etc., given a limited number of samples and computational elements, it is difficult for low-level structures to effectively represent complex functions, and for complex classification problems, performance and The generalization ability of the needle has obvious deficiencies, especially when the target object has a wealth of meaning. Deep learning through a network of a large number of simple neurons, the use of non-linear relationship between input and output, the complexity of the function approximation of the observed sample fitting, and in the learning of the nature of the input sample extract reflects the strong power.

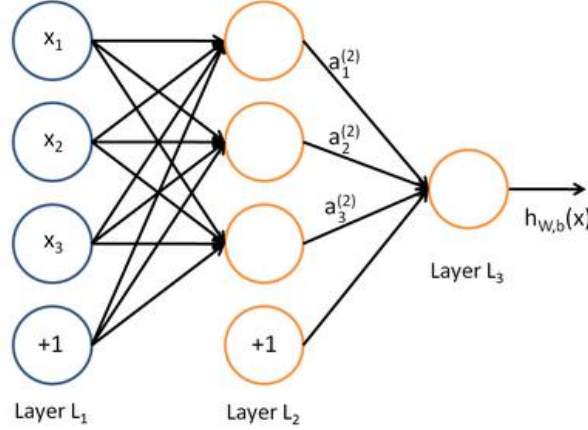
The simplest Neural Network consists of only one neuron, as follows:



This neuron consist of $\sum_{i=1}^3 W_i x_i$ and an intercept of +1 as input, and $h_{W,b}(x) = f(W^T x) = f(\sum_{i=1}^3 W_i x_i + b)$ as output, where the function $f: \mathbb{R} \rightarrow \mathbb{R}$ is the activation function. In BANCA, we use sigmoid as the activation function $f(\cdot)$

$$f(z) = \frac{1}{1 + \exp(-z)}.$$

A Neural Network is a connected set of multiple single neurons, where the output of one neuron could be the input of another, as follow:



As above, the leftmost layer is called the input layer, while the rightmost layer is the output player. All the middle nodes are called the hidden layer, as we cannot see their values during training.

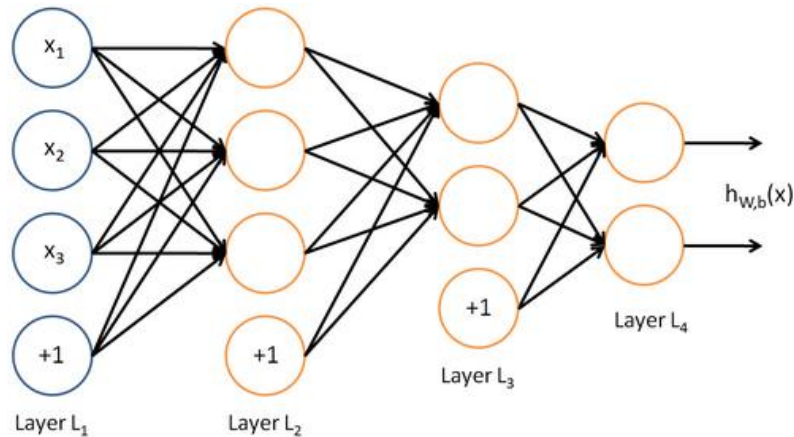
Given the parameter set W, b , our Neural Network can be computed using function $h_{W,b}(x)$. In this example, it is:

$$\begin{aligned} a_1^{(2)} &= f(w_{11}^{(1)}x_1 + w_{12}^{(1)}x_2 + w_{13}^{(1)}x_3 + b_1^{(1)}) \\ a_2^{(2)} &= f(w_{21}^{(1)}x_1 + w_{22}^{(1)}x_2 + w_{23}^{(1)}x_3 + b_2^{(1)}) \\ a_3^{(2)} &= f(w_{31}^{(1)}x_1 + w_{32}^{(1)}x_2 + w_{33}^{(1)}x_3 + b_3^{(1)}) \\ h_{W,b}(x) &= a_1^{(3)} = f(w_{11}^{(2)}a_1^{(2)} + w_{12}^{(2)}a_2^{(2)} + w_{13}^{(2)}a_3^{(2)} + b_1^{(2)}) \end{aligned}$$

We use $z_i^{(l)}$ to denote the weighted sum of the l th level and the i th unit, for example, $z_i^{(2)} = \sum_{j=1}^n W_{ij}^{(1)}x_j + b_i^{(1)}$, then $a_i^{(l)} = f(z_i^{(l)})$.

If we put all the parameters in a matrix, and use matrix-vector computation methods, we can quickly solve these equations using linear algebra.

A Neural Network can have multiple output units. For example, in the Network below, there are 2 hidden layers: L_2 and L_3 , and there are 2 output units in the output layer L_4 .



To solve Networks like this, we would need sample set $(x^{(i)}, y^{(i)})$, where $y^{(i)} \in \mathbb{R}^2$. This would be suitable if the number of outputs to be predicted is more than one.

The first step is to define similarity:

SVD is one of the matrix factorization algorithms and baseline predictor is one type of optimization. The simplest SVD is to optimize the following loss function:

$$\min_{b_i, q_i, p_u} \sum_{(u,i) \in \mathcal{K}} (r_{ui} - \mu - b_i - b_u - q_i^T p_u)^2 + \lambda_4 (b_i^2 + b_u^2 + \|q_i\|^2 + \|p_u\|^2).$$

And then use random gradient descent to optimize:

$$\begin{aligned} \bullet b_u &\leftarrow b_u + y \cdot (e_{ui} - \lambda_4 \cdot b_u) \\ \bullet b_i &\leftarrow b_i + y \cdot (e_{ui} - \lambda_4 \cdot b_i) \\ \bullet q_i &\leftarrow q_i + y \cdot (e_{ui} \cdot p_u - \lambda_4 \cdot q_i) \\ \bullet p_u &\leftarrow p_u + y \cdot (e_{ui} \cdot q_i - \lambda_4 \cdot p_u) \end{aligned}$$

$$\hat{r}_{ui} = \mu + b_i + b_u + q_i^T (p_u + |R(u)|^{-\frac{1}{2}} \sum_{j \in R(u)} y_j)$$

timeSVD++ is to use the time dimension as one additional parameter:

$$\begin{aligned} p_u(t)^T &= (p_{u1}(t), \dots, p_{uf}(t)) \\ p_{uk}(t) &= p_{uk} + a_{uk} \cdot dev_u(t) + p_{uk,t} \quad k=1, \dots, f. \\ \hat{r}_{ui} &= \mu + b_i(t_{ui}) + b_u(t_{ui}) + q_i^T (p_u(t_{ui}) + |R(u)|^{-\frac{1}{2}} \sum_{j \in R(u)} y_j) \end{aligned}$$

Below is a brief overview of the code:

```
1.from __future__ import division
2.import numpy as np
3.import scipy as sp
4.from numpy.random import random
5.class SVD_C:
6.def __init__(self,X,k=20):
7. """
8.k is the length of vector
9. """
10.self.X=np.array(X)
11.self.k=k
12.self.ave=np.mean(self.X[:,2])
13.print "the input data size is ",self.X.shape
14.self.bi={}
15.self.bu={}
16.self.qi={}
17.self.pu={}
18.self.movie_user={}
```

```

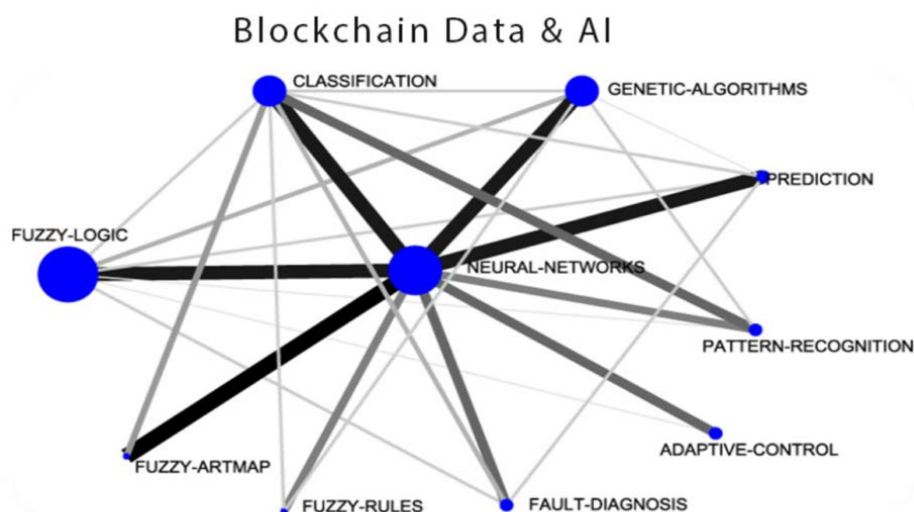
19.self.user_movie={}
20.for i in range(self.X.shape[0]):
21.uid=self.X[i][0]
22.mid=self.X[i][1]
23.rat=self.X[i][2]
24.self.movie_user.setdefault(mid,{})
25.self.user_movie.setdefault(uid,{})
26.self.movie_user[mid][uid]=rat
27.self.user_movie[uid][mid]=rat
28.self.bi.setdefault(mid,0)
29.self.bu.setdefault(uid,0)
30.self.qi.setdefault(mid,random((self.k,1))/10*(np.sqrt(self.k)))
31.self.pu.setdefault(uid,random((self.k,1))/10*(np.sqrt(self.k)))
32.def pred(self,uid,mid):
33.self.bi.setdefault(mid,0)
34.self.bu.setdefault(uid,0)
35.self.qi.setdefault(mid,np.zeros((self.k,1)))
36.self.pu.setdefault(uid,np.zeros((self.k,1)))
37.if (self.qi[mid]==None):
38.self.qi[mid]=np.zeros((self.k,1))
39.if (self.pu[uid]==None):
40.self.pu[uid]=np.zeros((self.k,1))
41.ans=self.ave+self.bi[mid]+self.bu[uid]+np.sum(self.qi[mid]*self.pu[uid])
42.if ans>5:
43.return 5
44.elif ans<1:
45. return 1
46.return ans
47.def train(self,steps=20,gamma=0.04,Lambda=0.15):
48.for step in range(steps):
49.print 'the ',step,'-th step is running'
50.rmse_sum=0.0
51.kk=np.random.permutation(self.X.shape[0])
52.for j in range(self.X.shape[0]):
53.i=kk[j]
54.uid=self.X[i][0]
55.mid=self.X[i][1]
56.rat=self.X[i][2]
57.eui=rat-self.pred(uid,mid)
58.rmse_sum+=eui**2

```

```

59.self.bu[uid]+=gamma*(eui-Lambda*self.bu[uid])
60.self.bi[mid]+=gamma*(eui-Lambda*self.bi[mid])
61.temp=self.qi[mid]
62.self.qi[mid]+=gamma*(eui*self.pu[uid]-Lambda*self.qi[mid])
63.self.pu[uid]+=gamma*(eui*temp-Lambda*self.pu[uid])
64.gamma=gamma*0.93
65.print "the rmse of this step on train data is ",np.sqrt(rmse_sum/self.X.shape[0])
66.#self.test(test_data)
67.def test(self,test_X):
68.output=[]
69.sums=0
70.test_X=np.array(test_X)
71.#print "the test data size is ",test_X.shape
72.for i in range(test_X.shape[0]):
73.pre=self.pred(test_X[i][0],test_X[i][1])
74.output.append(pre)
75.#print pre,test_X[i][2]
76.sums+=(pre-test_X[i][2])**2
77.rmse=np.sqrt(sums/test_X.shape[0])
78.print "the rmse on test data is ",rmse
79.return output

```



The smart rewarding system of BANCA is based on Neural Networks and Pagerank models and we call it AI-based Contribution Metric (ACM):

In PageRank:

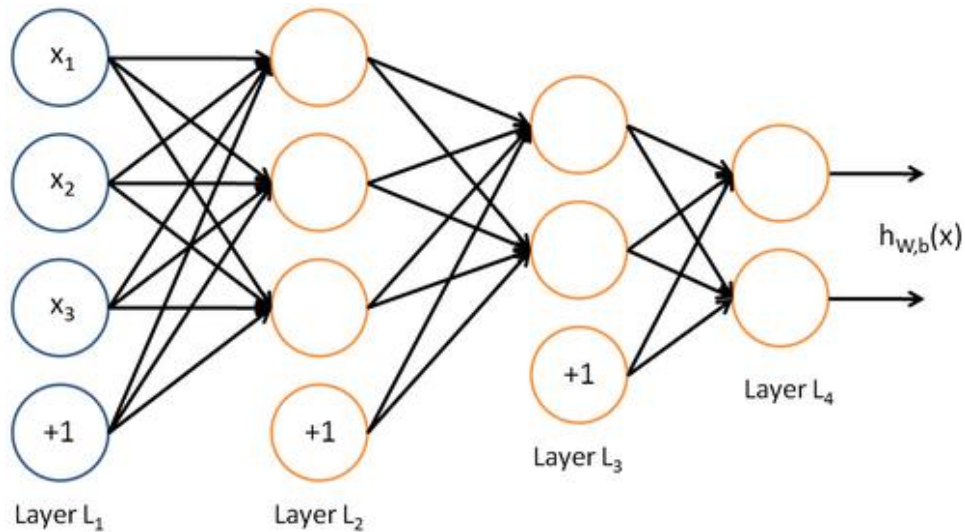
$$R = \begin{bmatrix} \frac{(1-q)/N}{(1-q)/N} \\ \vdots \\ \frac{(1-q)/N}{(1-q)/N} \end{bmatrix} + q \begin{bmatrix} e(p_1, p_1) e(p_1, p_2) \dots e(p_1, p_N) \\ \vdots \\ e(p_N, p_1) \dots e(p_N, p_N) \end{bmatrix} R$$

$$R = q \times P \times R + (1 - q) \times e/N \quad (e \text{ is the unit vector}) \quad 0$$

In a context sensitive PageRank:

$$R = q \times p \times R + (1 - q) \frac{s}{|s|}$$

As below, every node in the hidden and output layers is obtained from the nodes in the previous layer with weighted sum and the nodes with “+1” are intercept b. For every node not in the input layer: $Y = w_0 \times x_0 + w_1 \times x_1 + \dots + w_n \times x_n + b$, and Neural Network is equivalent to a multi-level logistic regression structure.



Generally speaking, Neural Networks consist of 3 steps: initialization, feed forwarding, and back propagation.

1. Initialization: Since this is a n-layer Neural Network, we use a 2-dimensional array to record the values, where the first dimension is the layer number and the second dimension is the location of the node, and the value is the array value. The error values of all the nodes are recorded in the same way. We also use a 3-dimensional array to keep the weights of all the nodes, where the first dimension is the layer number, the second dimension is the node location, the third dimension is the location of the node in the next layer, and the value is the weight value from the current node to the next node (a random value initialized between 0 and 1). To optimize for convergence, we use the momentum method for adjustment, and keep them int the 3-dimensional array. We directly set the

intercept to be 1 so that we only need to compute the corresponding weight.

2. Feed Forwarding: Use S function $1/(1+\text{Math.exp}(-z))$ to normalize the value of every node into $[0, 1]$, and then forward compute until the output layer, while we would not need the S function for the output layers.

3. Back Propagation: We usually use the sum of squares as the error function:

$$E = \frac{1}{2} \sum_{k \in k} (O_k - t_k)^2$$

In fact, it is the same as logistic function and we would not discuss the mathematic reasoning of this function. We would need to minimize this E function and thus would need to take the derivative:

$$\frac{\partial E}{\partial W_{jk}} = (O_k - t_k) O_k (1 - O_k) O_j$$

The error array keeps the minimized error of the weights, and then we can adjust the weights using the array. We use the momentum method for the adjustment to avoid any local minimum:

$\Delta w(k+1) = \text{mobp} * \Delta w(k) + \text{rate} * \text{Err} * \text{Layer}$ where k is the number of recursions, mobp is the momentum term and rate is the learning step size.

We can also use the following formula:

$$\Delta w(k+1) = \text{mobp} * \Delta w(k) + (1 - \text{mobp}) * \text{rate} * \text{Err} * \text{Layer}$$

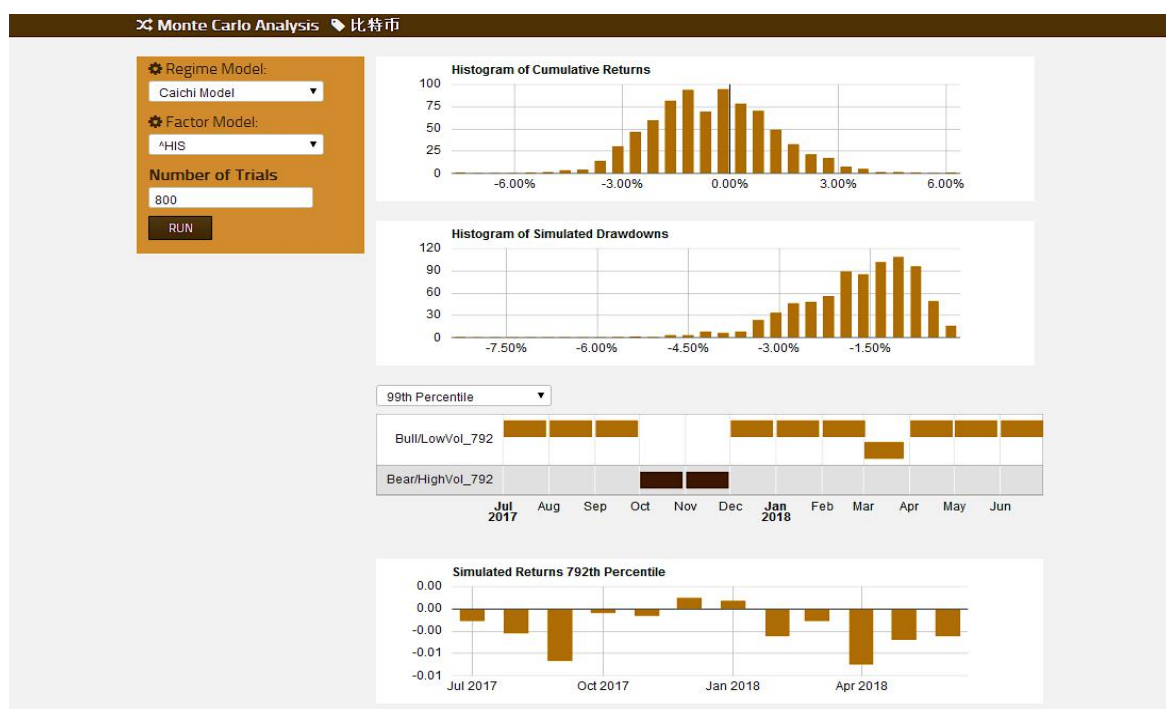
6. Banca community seed applications

6.1 Coin AI

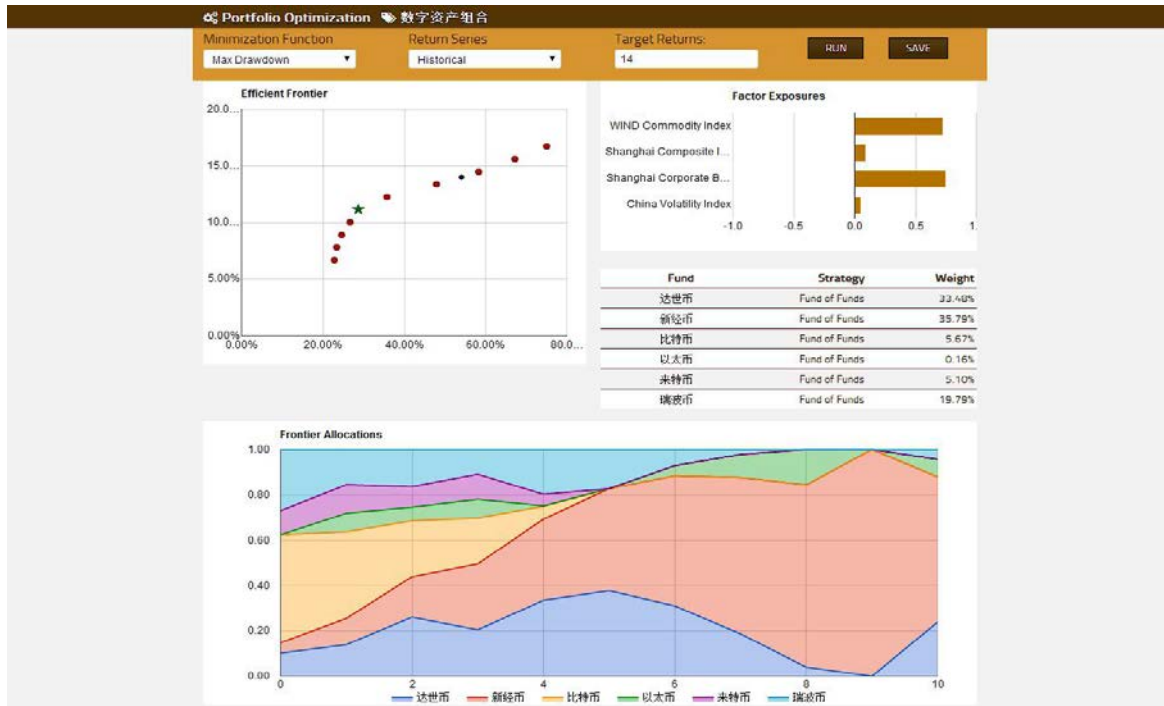
Our team has successfully developed CoinAI digital currency quantitative analysis, medium-term forecast and an asset allocation system as seed applications for the secondary market of the Banca community.

- Clients can use CoinAI to conduct in-depth analysis of digital tokens and compare the investment value and risk of different currencies.
- Clients can use CoinAI to obtain the prediction for the future trend of tokens based on artificial intelligence and big data smart beta market timing models.
- According to your own risk assessment, you are one click away from building the optimum portfolio.
- Based on the dynamic management of the optimized portfolio on token fund and outstanding old back-testing performance, the return is far higher than that of Bitcoin, while the risk is far below than that of Bitcoin.

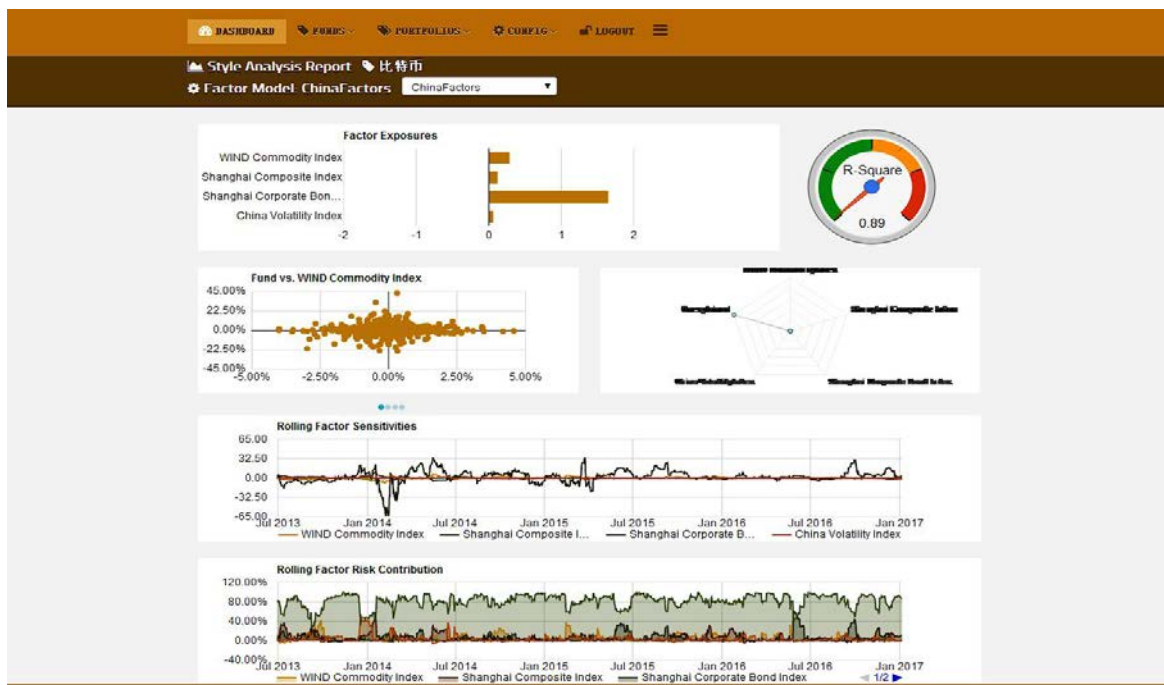
SMART BETA CRYPTO FORECAST MODEL



CRYPTO PORTFOLIO ASSET MANAGEMENT



IN DEPTH ANALYSIS



6.2 Other seed applications on banca

Regime analysis/medium-term forecast system

A Smart Beta Medium-Term Timing Model for regime analysis developed by our team over the years based on big data, money flow and calendar effect will be used as a seed application in the secondary market, and it will play an important role in the management of digital assets, asset allocation and risk management.

Intelligent market system

A robotized intelligent market system developed by our team will serve as a seed application in the primary market to provide liquidity management and market value maintenance for new digital currency projects.

6.3 Banca digital currency index and ETF

Our team has years of experience in designing, issuing and operating financial projects in Wall Street and China, especially in the design, issuing, trading and risk management of ETF products. To meet the needs of institutions and investors in the field of digital currency for asset allocation and long-term digital asset management, we are designing and issuing Banca digital currency funds, which will serve as important seed applications in the secondary market on the Banca platform.

Banca top 10 digital currency indexes and ETF

ETF holding the positions in top 10 digital currencies, adjusted monthly.

Banca top 50 digital currency indexes and ETF

ETF holding the positions in digital currencies ranking between 11 and 60 in market value, adjusted monthly.

Banca top 100 digital currency indexes and ETF

Holding the positions in digital currencies ranking top 100 in terms of market value, adjusted quarterly.

Banca plate digital currency indexes and ETF

Issuing Banca indexes and ETF on public blockchain, payment, technology and small-market value plates, adjusted monthly.

7.TEAM MEMBERS

Our team has the following outstanding features:

- The Banca team has top professional financial talents from Wall Street, who first entered the field of digital currency. They are pioneers developing the investment banking business of digital currency.
- An accomplished international technical team. The team has talents in the development of Silicon Valley big data, artificial intelligence and top investment banking technologies, more than 15 years of development experiences.
- Wall Street' s top cross-functional, cross-domain team members. Partners come from early and late investment markets, Wall Street's top investment banks, quantitative hedge funds and digital currency markets, covering most investment fields, with a wealth of investor networks and resources.
- Partners have accumulated financial network resources for many years, which can be converted and used in the Banca investment community.

The following are key members:

1. Linda Chen (CEO)



Linda has 12 years of investment management experience in Wall Street investment banks and hedge funds, successively working for DFD Select Group, a famous fund of hedge fund (FOHF) of asset management in Wall Street, Eaton Partners, and Hong Kong's Ajia Partners, where she was responsible for investment management, personally interviewing thousands of private hedge funds at home and abroad. She then went on to start her own business, founding Golden Bridge International in New York and Shanghai Caichi Asset Management Co., Ltd. She is familiar with the development path and operational management of start-ups. Caichi Asset introduced the Buffett Fund to Chinese investors for the first time, with over 800 million RMB of the management scale and over 500 million USD of overseas asset management scale, making it a sustained and excellent investment.

After entering the market of digital currency, she was the first to propose the application of Wall Street's advanced Smart Beta quantitative timing algorithm to the investments in the digital token market, achieving excellent investment returns for her portfolios. At the same time, she accumulated extensive networks between project sides, investors and service providers in the field of currency, which lays a foundation for the development of the Banca community.

Linda grew up in Australia, graduated from The University of New South Wales and received degrees in both Actuarial Science and Accounting.

2. Dr. Yuhan Cai (CTO)



Dr. Yuhan Cai is a leading expert in the financial technology field in Silicon Valley, with 16-years of experience in core technology development and team management. He has worked for Microsoft, Amazon, Google, Apple and other large technology companies, and was responsible for the architecture, development and operational maintenance of financial big data platforms. He was the Senior Technical Director of Apple and was responsible for the design and optimization of machine learning models in user behavior analysis system before joining our team.

He was the Founding Member & Technical Director of ZenMarketing business division, successfully developing integration and analysis platforms for big data mobile applications, rapidly setting up his own technical team. Project results include: high-speed real-time bidding platform, cloud big data risk control system and Samsung private cloud.

Dr. Yuhan Cai has obtained many patents for inventions and published 25 professional papers on information theory, artificial intelligence, big data, game theory, calculation method and other fields, and has won several awards from the National Science Foundation, United States, and Best Paper and Best Show, etc., from the Association for Computing Machinery (ACM).

“Chebyshev Efficient Index” , “Stock Pattern Matching” and other patents about big data application obtained by Dr. Yuhan Cai will be transplanted to Banca community and become significant technical advantages.

Dr. Yuhan Cai graduated from University of British Columbia (Bachelors Degree) and University of Washington (Doctorate in Computer Science).

3. Artem Sokolenko (Chief Marketing Officer)



He is a top-class marketer and sales expert in Europe, having many years' experience in international marketing and branding for multi-national companies. He is now responsible for the operation and marketing of Banca community.

He used to lead marketing teams in Europe, Dubai, the United States and Russia while working for multi-national companies and at the same time providing strategic advisory to international big brands such as Hershey and Armani.

He is going to lead Banca's marketing team and promote the startup's idea, product and service on overseas community, social media and major international media.

4. Leo Li (Director of Digital Currency Investment Products)



Leo has professionally worked as a senior financial products designer, with rich experience in financial product design, asset allocation and services for high-net-worth investors. He worked for Hillview Capital Advisors in Wall Street, where he was responsible for the allocation of all kinds of assets around the world and analysis of financial products. His ten-year investment experience covers global stocks, bonds, commodities, and a variety of complex financial products.

In 2016, he returned to co-found a number of financial/non-financial enterprises, including Shanghai Qiyi Investment Management Co., Ltd. (Founding Partner) and Shanghai Yingquan Education Technology Co., Ltd. (Founding Partner), etc.

Leo has a Bachelors degree in biology from Fudan University and a Masters Degree in Finance from George Washington University.

5. Jeffrey Barr (Director of Infrastructure of Investment Banking Service)



Jeff is one of Wall Street's senior investment banking experts who worked in Citibank's Investment Banking Division and was responsible for issuing financial derivatives and other complex financial products, evaluating and rating derivative projects and related legal affairs, financial analysis and business negotiation, etc.

After leaving Citibank, he became engaged in wealth management for private families in Wall Street for a long time, and has successfully applied his understanding and experience with complex financial products, and has gained excess revenue for high-net-worth families and institutions.

He graduated from the world-famous Wharton School of the University of Pennsylvania, with a Bachelors Degree in Finance and a MBA.

6. Jay Tang (Director of Operations)



Jay once worked for famous Canadian trading company SwiftTrade and at well-known domestic securities company Guosen, successively serving as Trader, PR Manager and Director of Operations of a branch. While serving as an Investment Counselor, he was responsible for, through communicating with China's top financial public relations companies including Citigate Dewe Rogerson, providing all-around financial services for institutions and high-net-worth clients and expanding the market for the company's business and products, with excellent performance achieved.

While working for financial institutions, he invested in stocks, funds, futures and digital currencies as an independent investor to maintain close ties to the market. He can acutely capture the market's demand trend and find investors' pain points.

Jay holds Bachelors Degrees in Finance and Management Information Systems from the North China University of Science and Technology.

7. Bing Chen (Chief Scientist Founding Partner)



Dr. Bing Chen is a Senior Researcher of Murray Hill Research Center, AT&T, and is a world-leading scientist in research and development of information technology and data processing. She was responsible for VoIP network construction and testing, and has obtained 21 patents and published 21 papers on IEEE Communication. She has delivered many speeches at international academic forums.

She is a world-class expert in speech compression algorithms, echo cancellers, statistical analysis, ITU network planning models (E-Model) and objective speech quality models (PESQ, PAMS).

Dr. Bing Chen was a lecturer at Rutgers and a postdoctoral scholar at the University of Rochester.

She holds a Bachelors degree in Mechanical Engineering from Taiyuan University of Technology and a Doctorate in Experimental Psychology from University of California, San Diego.

Dr. Bing Chen's patents, papers and scientific achievements will be used in basic underlying architecture and several modules of the Banca platform.

8.Liang Yu (Chief Architect)



Mr Yu was Vice President in the GBAM division of Bank Of America. He has more than 17 years of experience in technology infrastructure and project management in top Wall Street investment banks and world leading financial information providers. He has strong expertise in large real-time distributed systems, full stack system architecture and implementation of financial information platforms. Prior to Bank Of America, Mr Yu worked on various positions senior software engineer or project manager in the technology departments of Bloomberg, Morgan Stanley, Goldman Sachs, JPMorgan & Chase. He led projects or was involved in the development of products such as large scale distributed enterprise-wide data solutions, real-time global stocks trading systems, fixed-income securities trading applications and risk management systems for repurchase products.

Mr Yu holds a master degree in Computer Science from Queens College, CUNY, NYC. He currently concentrates in the research, design and integration of the blockchain technology with various financial applications.



9.Pieta Feng (Senior Manager)

Pieta was a member of Enactus, an international entrepreneurial organization, and has learnt a lot of entrepreneurial experiences in his early years. Enactus, founded in 1975, is a non-profit organization made up of global college students, academics and leaders from top 500 businesses, headquartered in the U.S.

After graduation, he worked for investment divisions of China's first-tier investment banks and well-known private placement institutions, where he was responsible for market and project analysis. Then, he entered the blockchain industry and participated as an independent investor in the evaluation and tracking of blockchain projects and trading in the secondary market.

Pieta graduated from Zhengzhou University with Bachelors Degrees in Finance and Management, and has rich experience in Media Operations

8. Supporters, early investors and advisors

1. Dr. Patrick Dai

Dr. Patrick Dai Founder of QTUM blockchain



Back in 2012, Dr. Patrick Dai started his research and development of cryptocurrency and its underlying technologies during his Ph.D. studies at the Chinese University of Science and Technology and the Chinese Academy of Sciences. He is an active evangelist in the blockchain community and a promoter of the blockchain applications in China. He previously worked for Alibaba, as a co-founder and a chief technology officer of BitSE. As a hero member of bitcointalk (bitcoin and blockchain community), Dr. Patrick Dai wrote a total of 10,000 posts. At the same time he wrote a "from 0 to 1 to build their own blockchain" development manual, which got more than a million views. He also leads the development of a series of global blockchain projects.

2. Aleksey Matiychenko

Aleksey is an early developer for the secondary market of Banca's ecological system, which is used to efficiently analyze the investment value and risk of digital assets, and build the optimum portfolio.



He has 16 years of experience in hedge fund quantitative analysis and risk management. He was mainly responsible for the construction and development of quantitative analysis and risk management systems. He served as Chief Risk Control Officer and Technical Director in Fund of Funds (FoFs) Investment Division of JPMorgan and led the entire risk control team, where he was responsible for the construction of FoFs risk control and sub-funds screening and evaluation systems.

The reason for his hedge fund performance is that the in-depth quantitative analysis system is currently the most cutting-edge hedge fund screening and evaluation system in the industry.

Aleksey, who immigrated to the U.S. from Russia with his parents as a child, holds a Bachelor's Degree in Computer Science and a MBA from New York University, and has obtained FRM, CFA, CAIA and other certificates of financial profession.



3. Jayden Wei

Founder of LEEKICO, Executive director of Collinstar Capital, Blockchain Fans and Fintech Startup Supporter. Australia's only digital currency block chain venture capital licence holder. Cryptocurrency Enthusiast. Experienced Fund Manager with a demonstrated history of working in the financial services industry. Strong finance professional with a Master's degree focused in Master of Business and Master of Professional Accounting from Monash University.



4. Jonas Sevel Karlberg

Jonas is a co-founder of the Nordic Blockchain Association, and the founder of AmaZix, the world's leading community management and engagement firm, instrumental in major successful token sales like Bancor, HDAC (by Hyundai), BANKEX, WePower and Sharpe Capital +50 more.



5. Quantum Foundation

Qtum Quantum Chain is committed to becoming the future value transport protocol and distributed application platform on the Internet, providing an automated, credible and frictionless blockchain platform for all walks of life.



6. CollinStar

CollinStar Capital, an Australian based asset management company and a market leader in Fintech, specializing in blockchain infrastructure, cryptocurrency investments, and relevant consulting services announced today that its subsidiary Blockchain Ventures signed an agreement with Draper Dragon Fund to set up a co-management fund to help build up Hcash Ecosystem.



7. CollinStar Capital

Lester Lim is the Marketing & Token Sale Strategy Advisor to top ICOs like Coinfi, Ink Protocol, Dock.io, and Selfkey. He is also a Blockchain investor and Founder of a global private syndicate investing in top ICOs. Being an online business owner, digital marketing strategist and Facebook ads specialist, he has helped private clients made multiple 7 - figures with his strategies, and for himself having done 7-figures in revenue and has over 30,000 customers from all over the world for his information and software business.



8. GENESIS

Genesis is named after Satoshi Nakamoto's concept of Genesis Block, which means to create a new era. It is a professional investment bank and venture capital firm specialized in the blockchain industry founded by ZhuHuaiyang and Sun Zeyu and devoted to discovering best quality blockchain projects and providing long-term integrated services to the industry. GENESIS has invested in dozens of blockchain projects such as TNB, Space chain, MDT, WKB, and IoT Chain.



9. Adrian Lam Ju Miin

ICO Advisor for I House, Darcmatter, Tradehero. ICO Lead for Electrify. Asia Founder of Workzspace.com which has listings of 1000+ Serviced Offices & Coworking space in Asia. Independent council member of the Gerson Lehrman Group (GLG). Former Chief Operating Officer of Sportshero now listed on Australian Stock Exchange (ASX)



10. Xing Zao Finance Venture capital firm

October 2014, Xing Zao Finance. was established at the beginning, as an innovative financial services based in Wenzhou, to the bank as early as the financial firms, as early as venture capital, the Bank as early as equity investment clubs, financial coffee meeting room (KUANGA) as the center; the strategic cooperation includes Shanghai Chengtai Information (Big Data Bank), CIFH (internet insurance), Bohan Finance (finance & public relations), the state finance and education And other companies, is also currently investing in a Silicon Valley-based blockchain technology company (PeerNova); cooperation funds are Dimon Fund (Singapore), Wheelock (United States), Green Venture Capital, Radium gold control, Carey Capital, letter Zhongli, Haiquan Fund, and strive to create a more complete financial ecosystem. For investors to provide professional financial services, but also for their families to provide scientific financial education and financial planning programs.

11. Richard Wang

Partner of Draper Dragon Fund



Master of Telecommunications Engineering, National Jiao Tong University, Ph.D. Candidate. As a partner of Draper Dragon innovation fund, Mr. Richard Wang is mainly responsible for the investment side of artificial intelligence, blockchain, Internet of Things projects. He was involved in investing in ePay, Micro & Nano Technologies, Huan Qing Technology, Ai Puke, Wuxi Micro, inspirational technology, and other blockchain companies such as VeChain, Metaverse, RedPulse, ChainapeX, Alphacat, and DAF. Mr. Richard Wang during his 20 years of experience was engaged in technology research and development, marketing and other different positions, with the main focus in the electromagnetic field theory. Mr. Richard also founded EDT, Inc. Participated in the development and sales of communications products. Later on worked in Mass E-Commerce Co., Ltd. as chief executive officer.

Mr. Richard Wang in the past few years was interested in integrated circuits, financial and industrial Internet of things in terms of the market development and applications. At present, Mr. Richard Wang focuses on artificial intelligence applications and blockchain technology.

12. Jess Kim



A seasoned venture capitalist, who primarily focuses on crypto startups. Invested several projects including Ink Protocol, The Key, Qlink and MediBlock. Background in economics.

13.Dr.Bin Li

Dr. Bin Li Former Merrill Lynch VP, UBS Executive Director



Dr. Bin Li has 21 years of international financial industry experience and outstanding hedge fund management performance. Mr. Li received a bachelor's degree in theoretical physics from the University of Science and Technology of China in 1984 and went to the United States. In 1992, he received his Ph.D. in physics from New York University. After a year of postdoctoral research at the renowned Institute of Mathematical Sciences, he joined Merrill Lynch and was soon promoted to vice president for his outstanding work in securities research and trading strategy. Joined UBS in 1997 as Executive Director and Head of Global Quantity Trading Strategies and subsequently became a member of UBS's six-person executive committee in North America. Leaving UBS in 2000, Westport Financial LLC was co-founded as chairman and president of the board of directors, creating equity securities firms under WF, in the Nasdaq in Hong Kong. (AAStocks.com). Since 2002, Mr. Li has served as Paloma Fund Manager (Paloma is a legendary Quantitative Hedge Fund platform, cultivating Renaissance and DEShaws, the world's leading quantitative hedge fund renaissance technology company), Chief Operating Officer of Jiang Ping Asset Management Corporation, Chief of the Yellow River Fund Investment officer and other positions. Because of his outstanding performance and legendary experience in the field of financial investment, Mr. Li is also known as "Three Musketeers of Wall Street" with Jiang Ping and Li Yanxiu. Mr. Li obtained four invention patents granted by the U.S. Patent Office such as Automatic Stock Review, Artificial Neural Network Timing Prediction System, Market-Neutral Double-Matching Trading Model and Automatic Stock Search Technology. The book "Quantitative Analysis, Derivatives Models and Trading Strategies," a book by the World Science Press three reprinted, has become a classic Wall Street quantitative practitioners reference. Mr. Li holds the license of FINRA Securities, Inc., securities analysis, derivative securities, futures, traders, etc. in the United States: Series 3, 4, 7, 24, 55 and 63. It is also the author of Quantitative Analysis, Derivatives Modeling, and trading strategies. Mr. Lee started trading digital currencies in 2012 and used quantitative models to take advantage of arbitrage, automated operations and long position strategies in the unequal pricing of the various exchanges to obtain the alpha benefits.

9.BANCA Banca Token Application scenarios

BANCA is the digital token used by Banca community. Members need to pay BANCA for services provided by the community, while members who provide services or make contributions to the community will receive BANCA rewards. Here are examples of BANCA's application scenarios:

Application scenarios in the primary market: Members whose recommended projects are adopted will receive BANCA rewards; where a project is listed successfully, the project side shall pay BANCA to the listing service provider. Members (underwriting channel) collect BANCA as a project's token sales fee.

Application scenarios in the secondary market: The digital fund manager pays BANCA to research and investment services provider for the Investment Research Report; data collectors sell market data to get BANCA; members (intelligent investment consulting team) collect BANCA as a digital currency asset allocation service fee; members (token traders) pay BANCA to members (providers of trading systems) to rent the systems.

Application scenarios in OTC digital financial services: Members (digital asset trustee agencies) that provide asset trusteeship collect BANCA as trusteeship fee; members (risk control experts) obtain BANCA by offering risk management solutions to digital asset projects; members (OTC derivative traders) collect BANCA as a trading fee. Application scenarios in basic services: Members (investors) pay BANCA to members (law firms) for legal consulting; members (project sides) pay BANCA to members (accounting firms) for financial and auditing services; members (fund managers, trustees, OTC operators, etc.) pay BANCA to self-discipline association as membership fee.

9.RAISING PLAN

9.1 Total issuance

Total issuance: 20 billion BANCA

Selling 7 billion (35%) BANCA for (about 20 million USD)

1 QTUM=20,000 BANCA (1BANCA \approx 0.002USD)

Private placement

Selling 5 billion BANCA for (about 13 million USD)

Public placement

Selling 2 billion BANCA (about 7 million USD)

Proportion	Distribution Objects
35%	Presale & ICO
17%	R&D
12%	Early investors
18%	Marketing and operation
18%	Team

Team members have three years vesting schedule. This white paper is the first draft, and the distribution plan may be adjusted in the near future.

9.2 USE PLAN

Digital currencies raised this time will be used proportionately in the following areas:

Item	Proportion
Legal and audit	3%
Operations management	25%
marketing	22%
Develop and support developers	50%

9.3 Management mode of banca foundation

- Subject of crowd sale: Banca Technology Limited, The British Virgin Islands.
- Setting up a Singapore non-profit foundation and autonomous committee: Banca Foundation.
- Management principles: overall planning, comprehensive management, practical results, careful calculation, keeping expenditures within the limits of income.
- Third-party auditing: hiring a third-party accounting firm to audit on a regular basis.

9.4 Fund raising Road map

- In January 2018, Banca community will be launched and complete ICO private placement.
- In February 2018, ICO crowdfunding will be completed.
- In March 2018, Banca will be listed on exchanges.
- In May 2018, the first seed application Coin AI of Banca platform will be launched.

By the end of 2018, the Banca community investment banking platform will be built and the Beta version will be launched.

- In 2019, many project sides, business sides, selling sides, technology providers and basic service sides and investors will join the Banca community investment banking ecological chain. Its digital asset investment banking businesses will be comprehensive. Banca will build up its status as the world's first community investment bank!



10. Patents and writings

1. Patent: Improving The Relevance of Advertisements For Display

Authors: Ryan White, Mihnea Marinescu, Yuhan Cai

U.S. Patent Appln. No. 13/903,889

2. Indexing Spatio-Temporal Trajectories with Chebyshev Polynomials

Authors: Yuhan Cai and Raymond Ng

Proceedings of ACM SIGMOD 2004.

3. Indexing Saptiotemporal Trajectories with Chebyshev Polynomials

Yuhan Cai

Thesis for Master of Science

4. A New Collocation Extraction Method Combining Multiple Association Measures

Authors: Jian-Fang Lin, Sheng Li and Yuhan Cai

Proceedings of ICMLC 2008

5. Collocation Extraction Using Web Feedback Data

Authors: Jianfang Lin, Sheng Li, and Yuhan Cai

Chinese Journal of Electronics, Vol. 18, No.2, April 2009

6. A New Query Expansion Approach Using Collocation Relationships in Language Models for Information Retrieval

Authors: Jianfang Lin, Sheng Li, YuHan Cai

Journal of Information and Computational Science

7. Personal Information Management with SEMEX

Authors: Yuhan Cai, Xin Dong, Alon Halevy, Jayant Madhavan and Michelle Liu

Proceedings of ACM SIGMOD 2005.

8. Lookup Peaks: A More Sensitive Hybrid of De Novo Sequencing and Database Search for Protein Identification by Tandem Mass Spectrometry

Authors: Marshall Bern, Yuhan Cai and David Goldberg

Analytical Chemistry 2007

9. ByOnic: Fast and Sensitive Identification of Peptide Spectra Using Lookup Peaks

Authors: Marshall Bern, Yuhua Cai

Proceedings of ASMS 2006

10. A Statistical Approach to Instance-Level Schema Matching

Authors: Jianfang Lin, Sheng Li, Yuhua Cai, Michael Zhang

Journal of Information and Computational Science

11. Patent: End-to-end connection packet loss detection algorithm using power level deviation

Authors: Bing Chen, David Beaumont

U.S. Patent Appln. No. 09/801,481

12. Operating method for voice activity detection/silence suppression system

Authors: Bing Chen, James H.

U.S. Patent Appln. No. 10/942,518

11.Risk warning

This document is for communication purposes only and does not constitute any relevant opinion on purchasing Banca. This document does not constitute any investment advice, intention or solicitation regarding the form of securities. This document does not constitute and does not understand to be the provision of any trading, or any invitation to trade in any form of securities, nor any form of contract or commitment.

Banca team made it clear that relevant users were well-aware of the risks of participating in Banca. Investors, once involved, understand and accept the risks of the project and are willing to personally bear all the corresponding results or consequences.

Banca team made it clear that it would not bear any direct or indirect losses from participating in Banca platform, including:

- 1.Any possible investment risks arising from users' participation in the projects recommended by BANCA platform
- 2.Any errors, carelessness or inaccurate information arising from personal understanding
- 3.Losses arising from individual trading in all types of blockchain assets and any acts resulting therefrom.

BANCA is an encrypted token used by Banca platform. It shall not be regarded as an investment.

We cannot guarantee that BANCA will definitely appreciate, and in some cases there is the possibility of a decline in its value. People who do not correctly use BANCA may lose their right to use the corresponding tokens.

BANCA is not an ownership or right of control.

Controlling BANCA does not mean ownership of Banca platform. BANCA does not grant any individual the right to participate, control, or to make decisions on BANCA platform.

Given that the governments' regulatory attitude towards blockchain and encrypted digital currency industries is still unclear, the risk of establishing blockchain industry fund is objective. Moreover, because blockchain industry is at the very early stage of development, there are many uncertain risks. In addition, digital currency is stored in a special way, therefore fund risks may be caused by human errors. In response to fund risks, all large-value digital

currencies are stored by multiple wallets+cold storage in joint administration by members of the foundation. Under 3/5 multi-signature, the risk of theft and embezzlement of funds can be effectively reduced. These risks may lead to the final failure of the project.

ICO participants shall evaluate these carefully.

Legal affairs

Banca Foundation is currently established in Singapore. Matters requiring legal advice need to be confirmed by a local lawyer.

Dispute resolution

Where there is a dispute, the parties concerned shall, in accordance with the agreement, solve it by consultation. If it cannot be solved through consultation, it may be ruled by the court of the place where the foundation is registered according to the local law.