



# ARCHSTONE CAPITAL

**Founder : Jenher Jeng, PhD of Statistics, UC Berkeley**

**Co-Founder : Mark Powers, ...**

**IP Legal Advisor : Howard Chen, Greenberg Traurig**

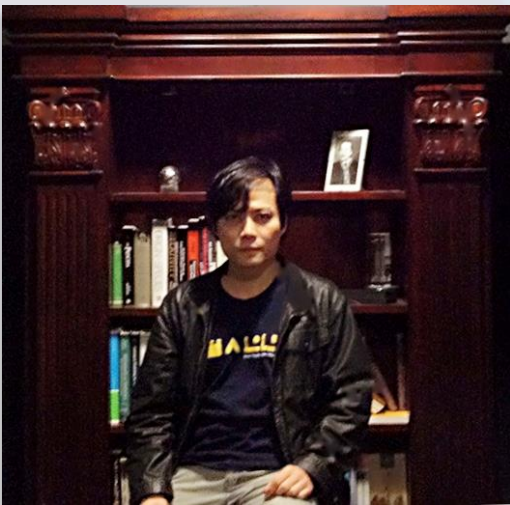
# The Founder – Jenher Jeng

- A pioneer of building knowledge technology for artificial general intelligence (AGI).
- Never trust the machine, but embrace and co-evolve with it towards the Cybernetic Revolution.
- Complex Dynamic Systems, Wavelet Signal Processing, Statistical Modeling, Mechanism Designs
  - **PhD of Statistics, UC Berkeley (2002)**
  - **Advisor, Journal of Digital Finance**
  - **Founder, Walex.io**

## Vision & Mission

In 1999, Jenher Jeng solved a crux of adaptive statistical model selection in Berkeley and was then intrigued by the possibility for machines to learn and perceive like the human, and thus he started to build SEMA, an architecture of artificial intelligence. He further envisioned the future going through the crosscurrents of the Cybernetic Revolution and the China Transition and their dramatic consequences – aggressive developments of AI without upgrading the humanity first could bring catastrophic impacts to our modern civilization. Therefore, he decided to go back to his homeland in Asia to push for a more liberal and innovative culture with industrial and educational reforms. However, after two decades of efforts, the cruelty of politics and culture makes Jenher Jeng realize that he needs to bring SEMA back home to Berkeley at the dawn of the Cybernetic Revolution for the best common interest of the whole world.

Jenher@walex.io



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Martin Vetterli (PhD Thesis Advisor)

- President of École Polytechnique Fédérale de Lausanne (EPFL)
- Ex-President of the National Research Council of Swiss NSF
- Member of the US National Academy of Engineering



Michael I. Jordan (Machine Learning Class TA)

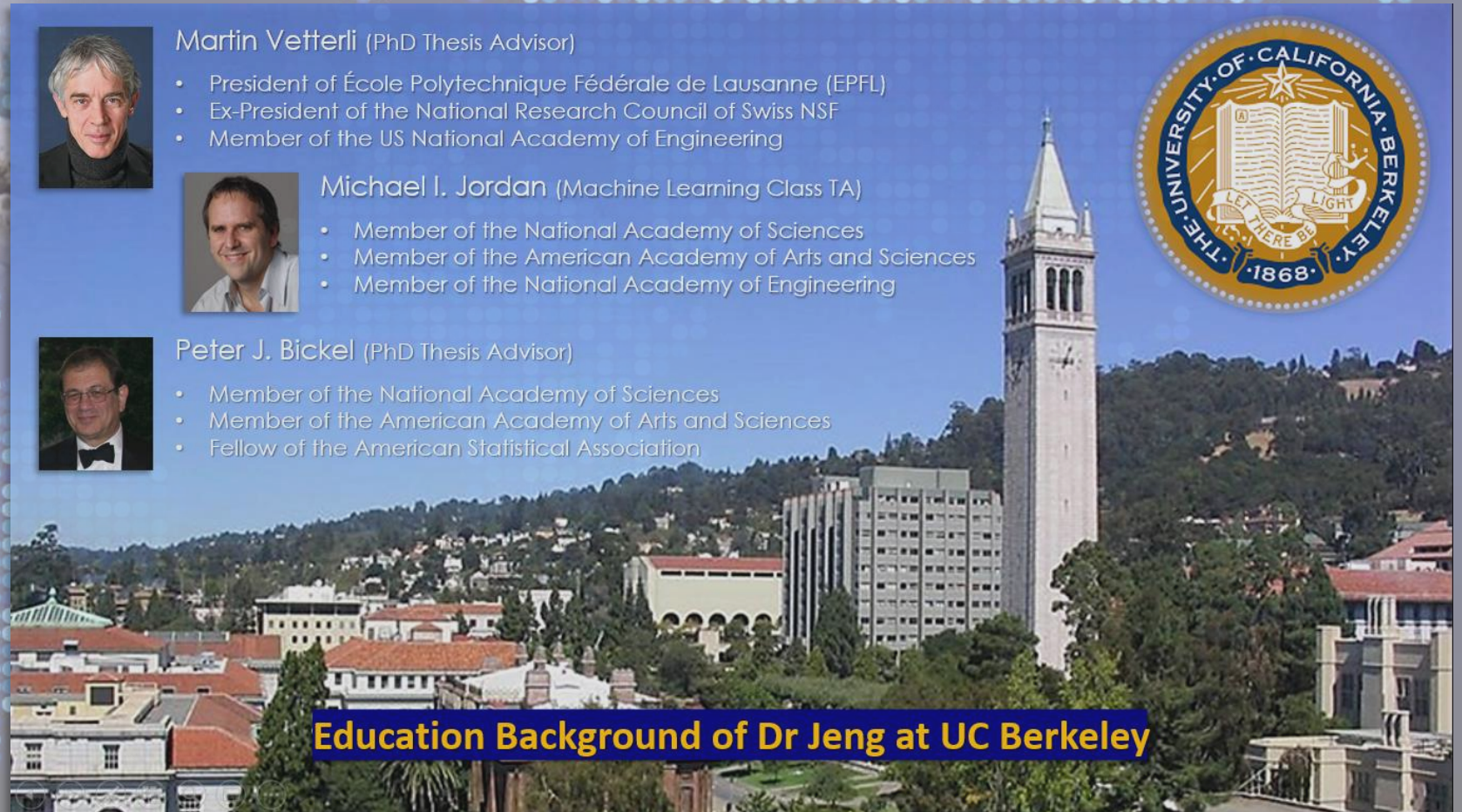
- Member of the National Academy of Sciences
- Member of the American Academy of Arts and Sciences
- Member of the National Academy of Engineering



Peter J. Bickel (PhD Thesis Advisor)

- Member of the National Academy of Sciences
- Member of the American Academy of Arts and Sciences
- Fellow of the American Statistical Association

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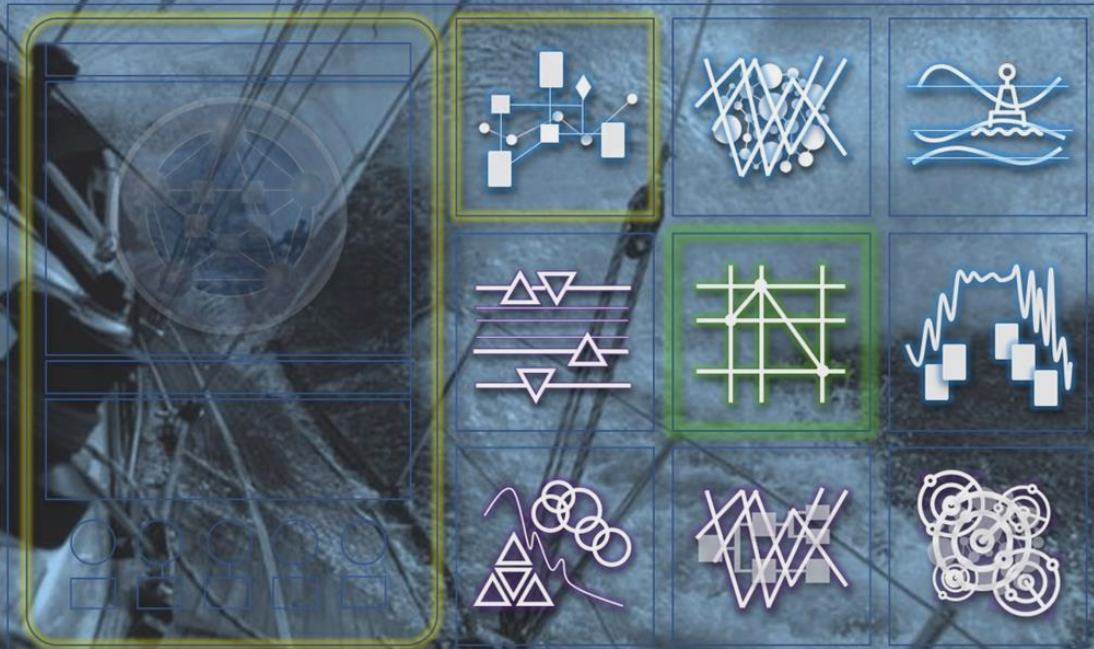












**Education Background of Dr Jeng at UC Berkeley**



# Voyager Terminal

*smart trading in feat and fintech*



## Macro Voyage

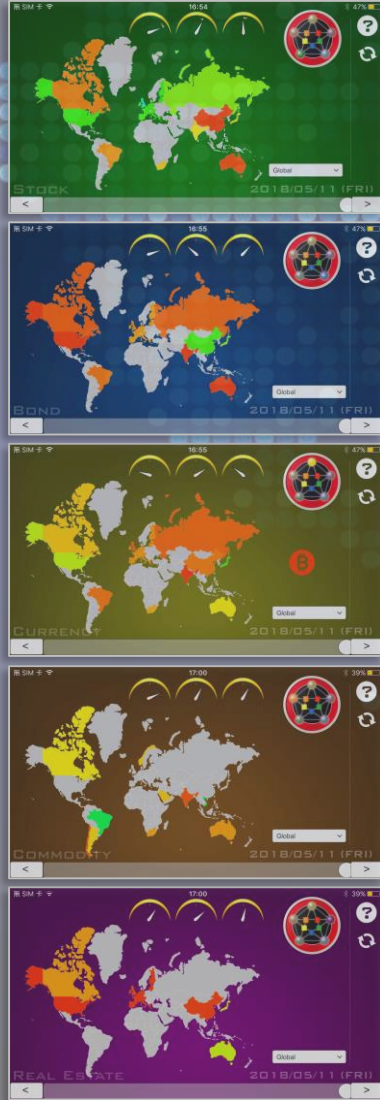
A canonical business model centered at & to monetize the universal and versatile financial engine Voyager, which can, through Voyager-Terminal, connect quants' specific AI algorithms in trading and systemic risk management applications and help them calibrate and build up their own AI (Architecture of Intelligence) for solving structural bottleneck problems. The model can be also applied to assist fund managers to improve their conventional human decision making processes for achieving much better adaptivity, robustness and consistency through market turbulences.

## VOYAGER & Market Instability Indices

The Market Instability Indices are leading indicators of market volatility, and thus they serve as the holy grail AI-compass for market makers and traders to safely sail through the complex and more and more algorithm-complicated capital markets; moreover, the stochastic patterns of their own time series go beyond predicting volatilities to quantitatively monitor how blackswan, butterfly and domino effects take place and evolves so that portfolio managers can connect market dots through those patterns to consistently tweak their strategies and tactics to outperform the market based on comprehensive market rationales.

# The Engine – VOYAGER since 2016

based on an AI architecture of financial engineering since 2002

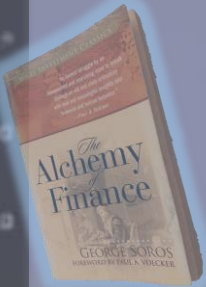


## VOYAGER presents unique/universal market instability indices:

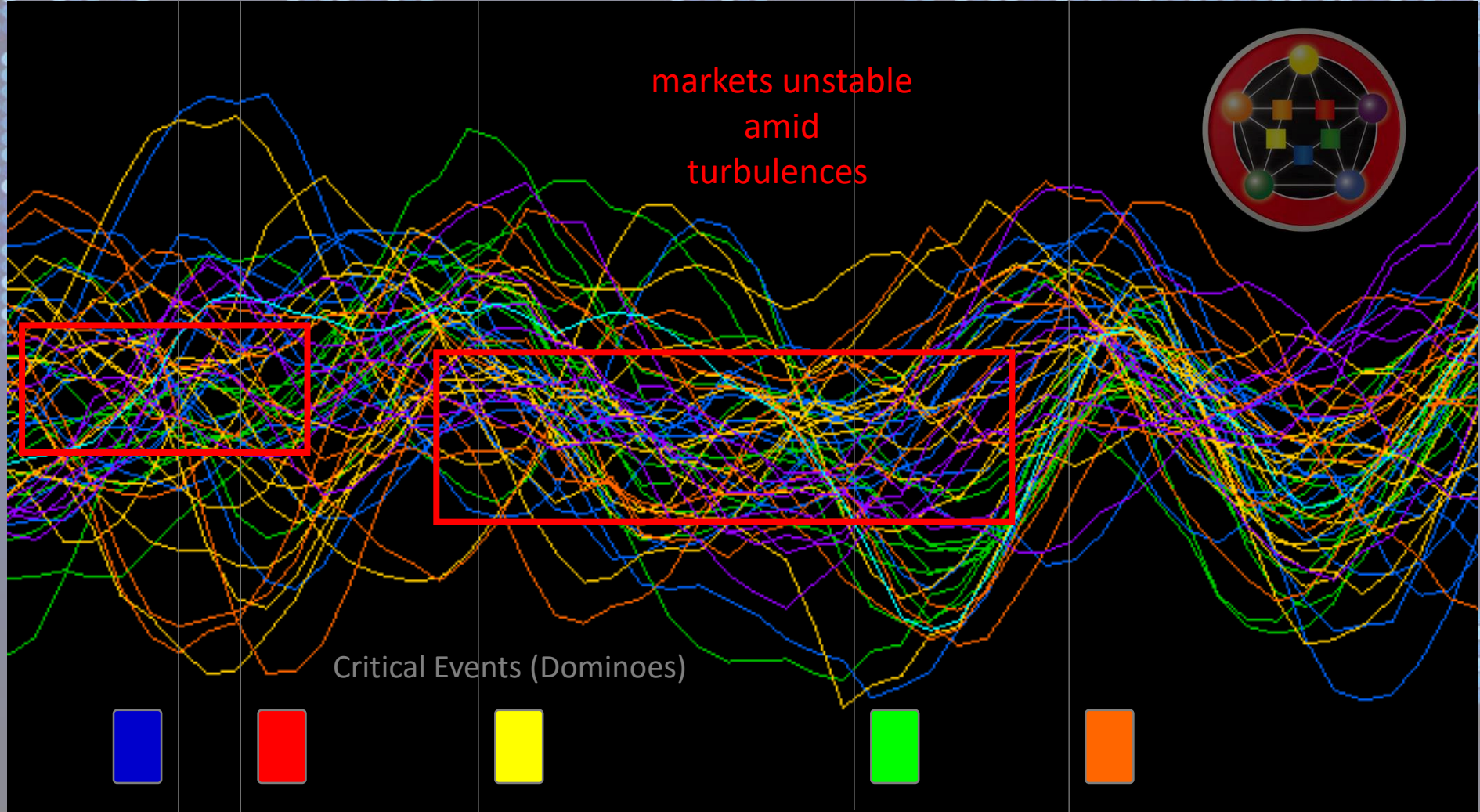
on the theoretical foundation of unstable equilibrium vs the general equilibrium theory

- ❖ leading indicators of market volatility indices
- ❖ gauging stability of equilibria of asset prices amid market dynamics
- ❖ quantitative measures of blackswan/butterfly/domino effects
- ❖ pinpointing critical events & assessing their impacts in risk tensors
- ❖ co-integrating other macro indicators from big data
- ❖ monitoring the trilogy of evolving systemic risks
- ❖ providing heat maps of tracking capital flows for GDAA strategies
- ❖ weaving systematic/sustainable playbooks of trading strategies/tactics

GDAA : Global Dynamic Asset Allocation - a general framework of asset management



# The Crux – Capital Flows driven by Risk factors



# The Product – VOYAGER TERMINAL



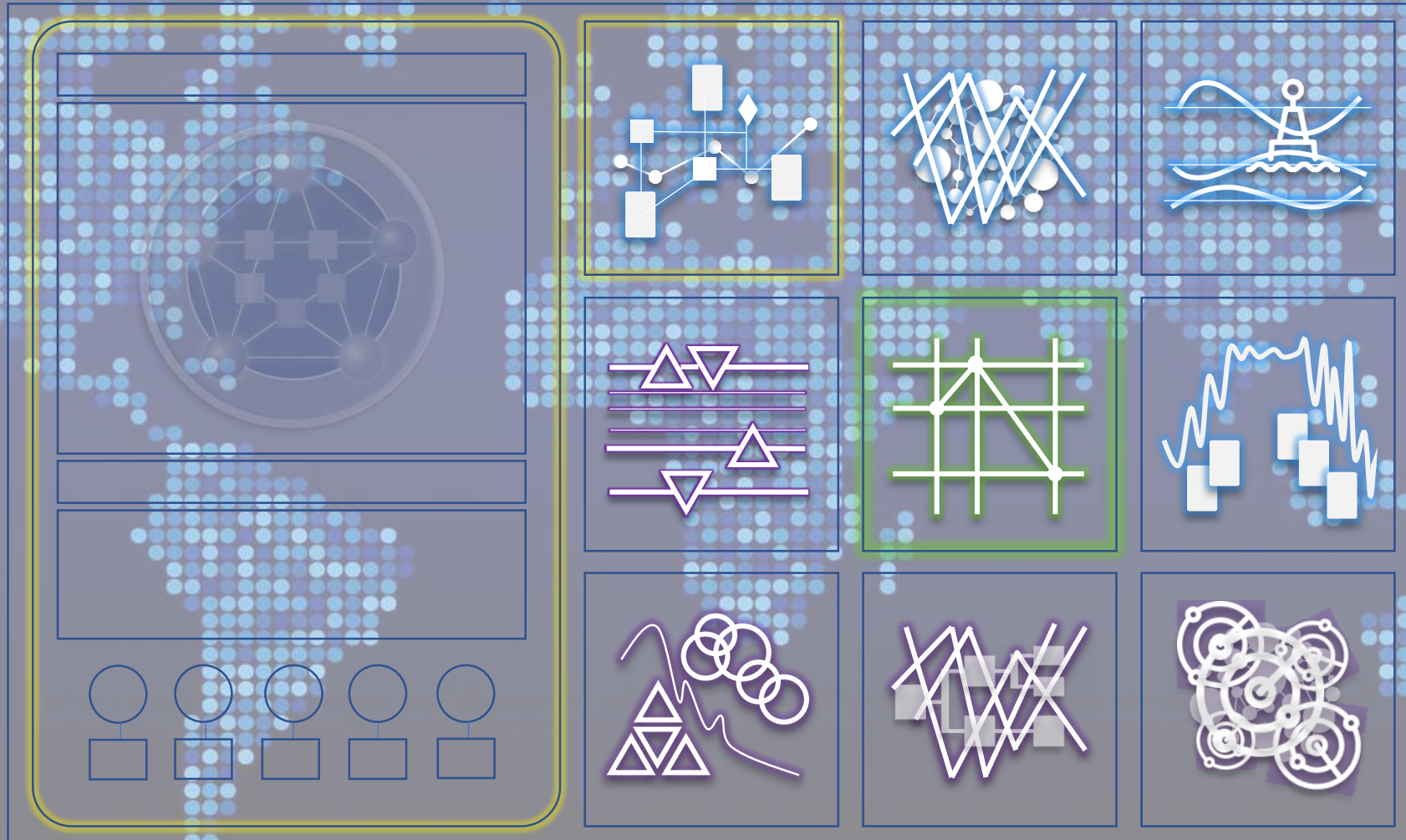
powered by SEMA & Smart Matrix (artificial intelligence and knowledge technology)

Macro Strategies on Domain Knowledge + Quant Tactics with Game Mechanism

walex.io

Knowledge  
Query  
Engine &  
Personal  
Knowledge  
Base :

- ❖ Dominoes
- ❖ KMs
- ❖ EBs
- ❖ HNs
- ❖ PBs
- ❖ PKB-KGs



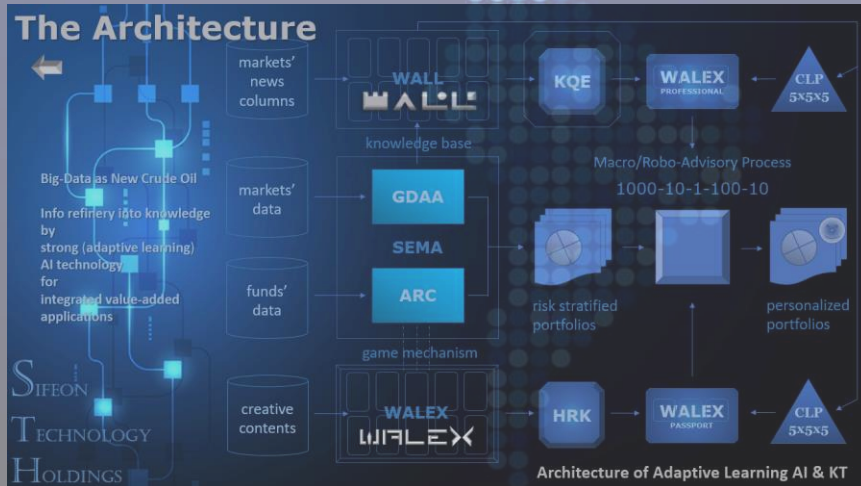
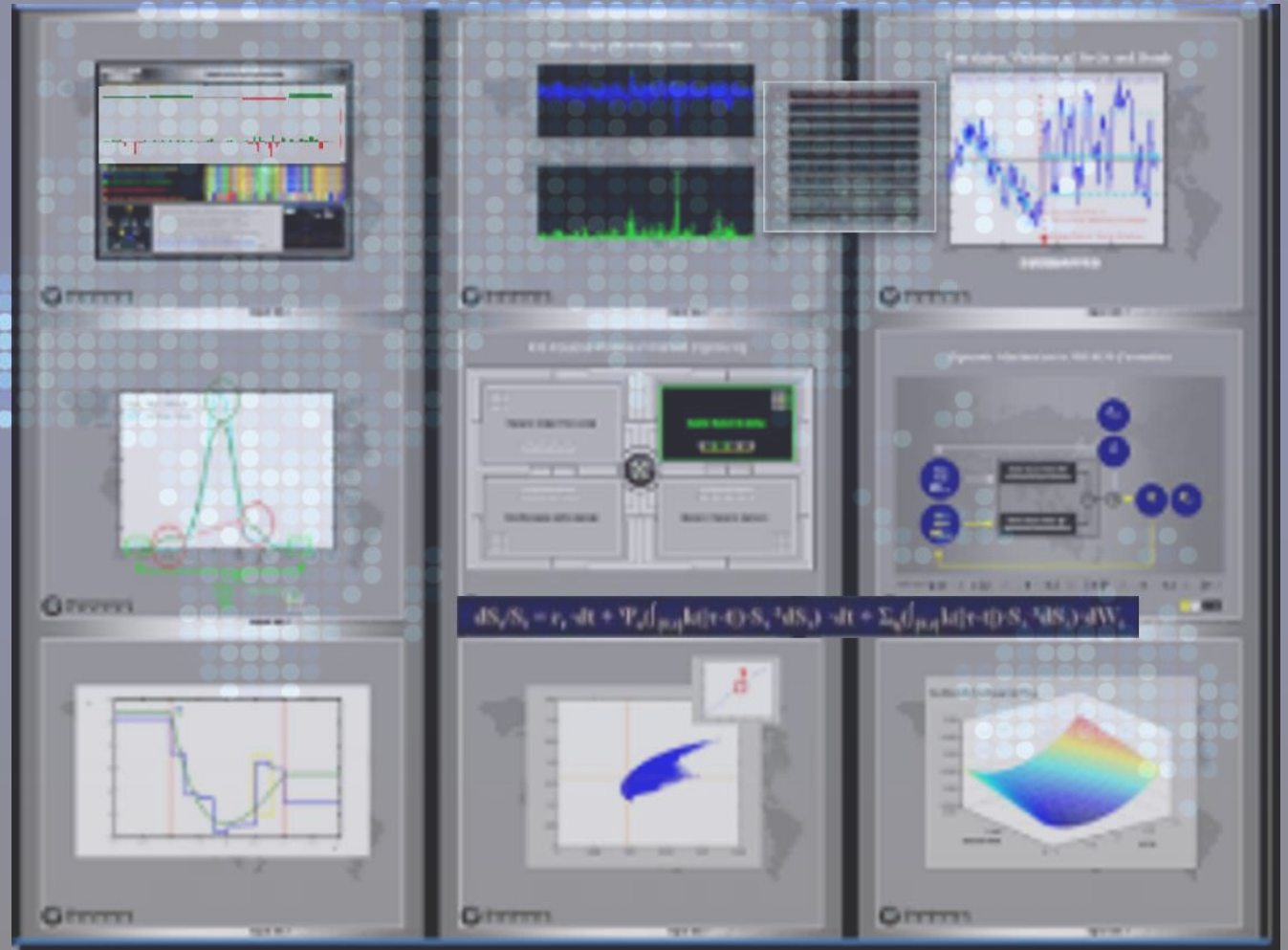
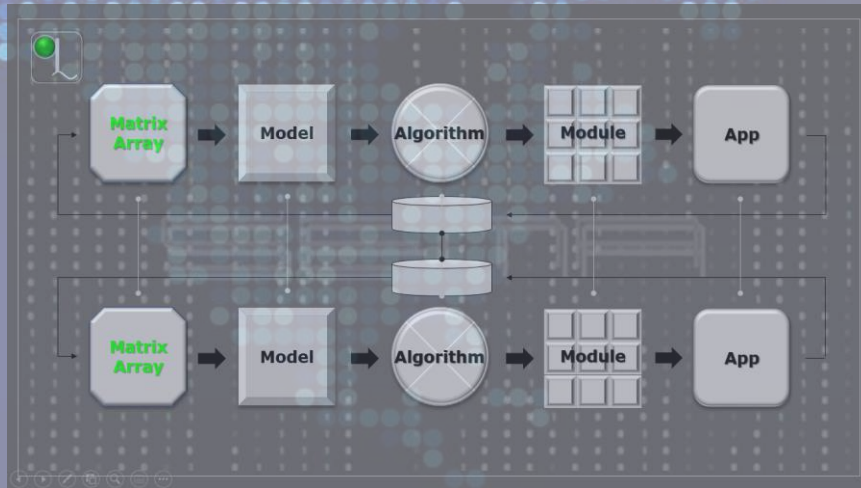
Macro/Robo  
Portfolio  
Management  
Console  
centered at  
Game Grid -

- ❖ Grids
- ❖ Dots
- ❖ Flows
- ❖ Buoys
- ❖ Dynamics
- ❖ Components
- ❖ Tactics
- ❖ Stages
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# The Architecture – SEMA behind VOYAGER Terminals

AI: Architecture of Intelligence in Simulation/Execution/Monitoring/Analysis

Machine/Human Hybrid-Learning to process info and knowledge for adaptive decision makings.

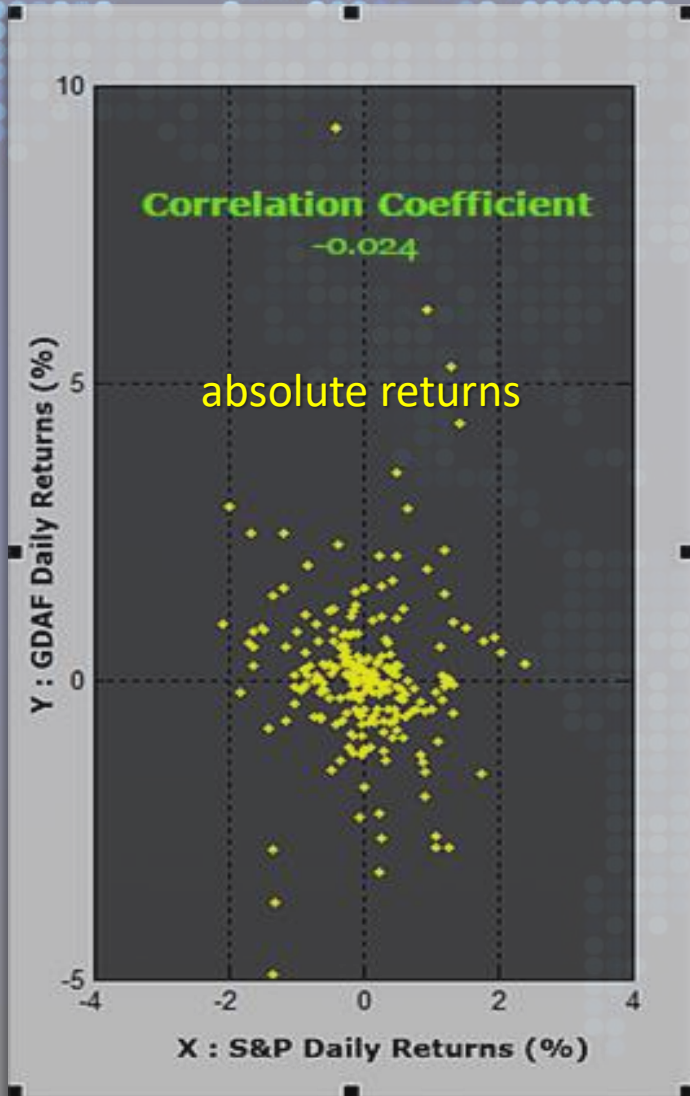




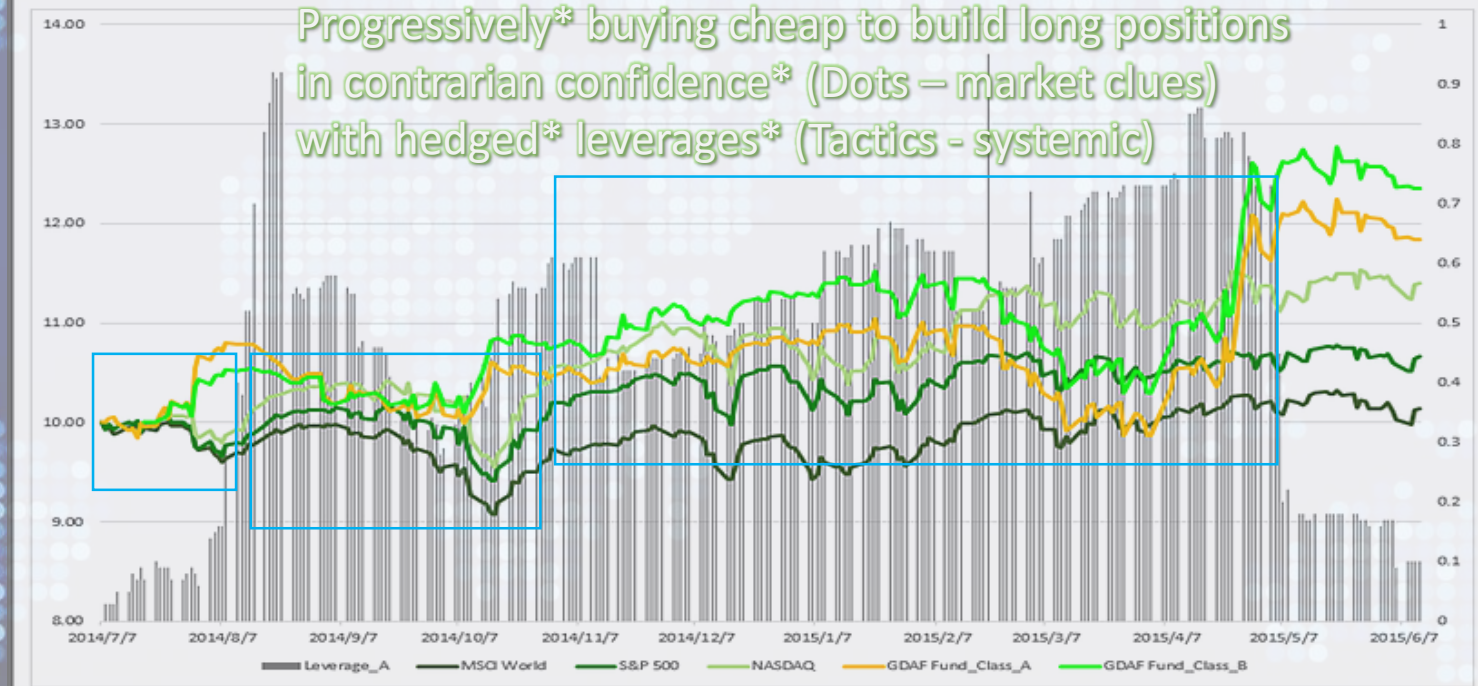


# The Performance – alpha/beta/gamma

VOYAGER has been designed through real “combat” experiences of strict hedge fund operation



Performance	MSCI World	S&P 500	NASDAQ	GDAF Fund_Class_A	GDAF Fund_Class_B
Ann. Return (%)	1.50	7.11	15.89	19.82	26.48
Ann. Std. (%)	10.13	12.08	14.07	18.84	18.28
3M M.D.D. (%)	9.17	7.40	8.23	10.63	10.63



Example of a trading combo of hedge/double-hedge/triple-hedge call/put options on Tesla

TSLA, 20150911, 255, CALL, Option, SMART, USD	30	2.63	7,890.00	3.55	-2,756.00
TSLA, 20150925, 280, CALL, Option, SMART, USD	-15	1.24	-1,850.00	2.9	2,499.00
TSLA, 20150911, 250, CALL, Option, SMART, USD	6	4.45	2,670.00	4.64	-114.00
TSLA, 20150911, 252.5, CALL, Option, SMART, USD	5	3.38	1,690.00	3.84	-231.00
TSLA, 20160115, 300, CALL, Option, SMART, USD	-5	9	-4,500.00	9.25	127.00



# Trillion-Dollar Q:

How our AI (SEMA) assists fund managers via VOYAGER terminals to

- ❖ calibrate hardcore trading algorithms/machines,
- ❖ build cybernetic trading teams/systems/principles and
- ❖ maintain robust connections with investors on market rationales.
















# The Service – Macro Voyage as the service package

Hardcore Machine Trading SOP & Softcore Human Interactive Value-Added Services

## ❖ Platform of Plug-in Services – Voyager Terminal & Game Grid

## ❖ Macro Voyage Core-Service Framework & SOP

-  ➤ Strategic Case-study Training Modules of Historic Lessons
-   ➤ Algo-Trading Back/Stress-Testing through Cycles/Turbulences
-   ➤ Tactical Hedging with High-Freq Instability Indices on Game-Grid
-   ➤ Strategic Hedging with Low-Freq Instability Indices on Game-Grid
-   ➤ Cross-Asset Hedging Strategies/Tactics in GDAA Framework
-   ➤ Systemic Risk Hedging Strategies on Game-Grid
-   ➤ Contour/Cascade of Allocation of Double/Triple Hedging Options

❖ AC Network - Share-Options of Long-Term Partnership for Alpha-Testing Clients

❖ ARCH - Fund Investor Relationship Management (IRM) Portal

❖ BlackKnight - Macro/Robo Trading/Advisory Team-Building/Training Program

# The Preview – VOYAGER TERMINAL



powered by SEMA & Smart Matrix (artificial intelligence and knowledge technology)

Macro Strategies on Domain Knowledge + Quant Tactics with Game Mechanism

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Knowledge  
Query  
Engine &  
Personal  
Knowledge  
Base :



Soros Macro Revelation on Pound



1992/09/16

Soros' Black Wednesday macro deployment of pound-shorting taught the BOE a lesson on its stubborn ERM-hooked monetary policies amid the post-Soviet EU integration.

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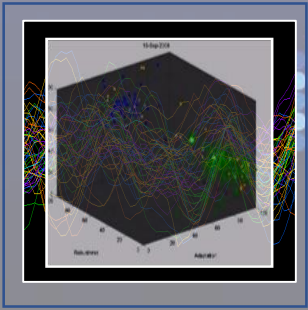
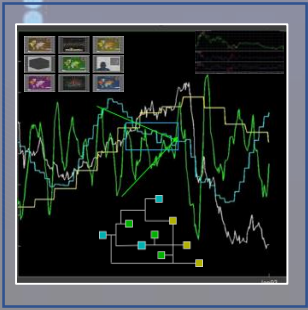
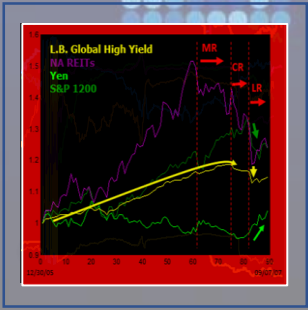
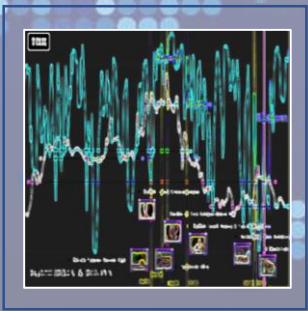
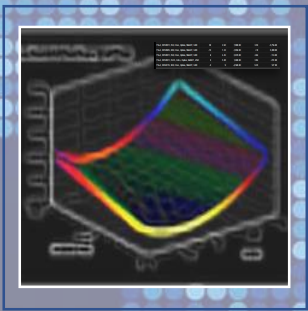
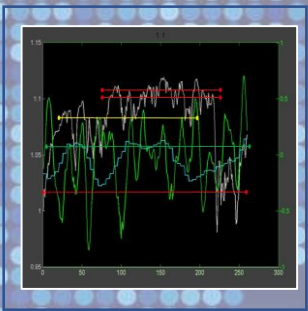
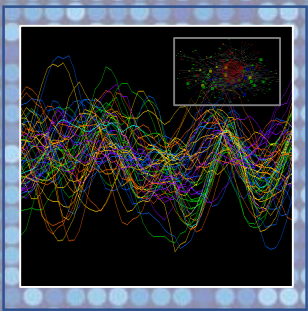
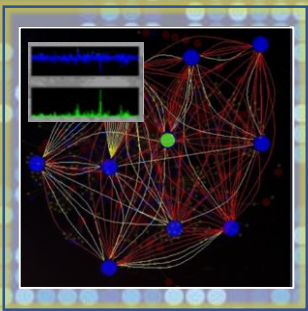
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+4
+2
-3
+2
+3

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