

Reputation System over 23 years

Anton Kolonin

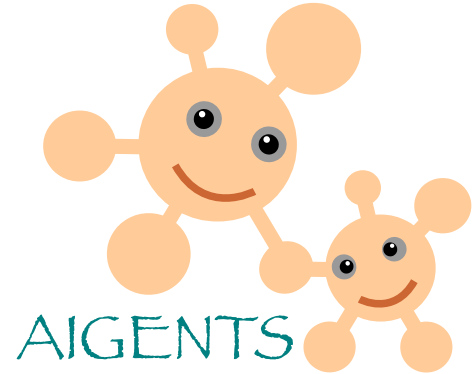
anton@singularitynet.io

akolonin@aigents.com

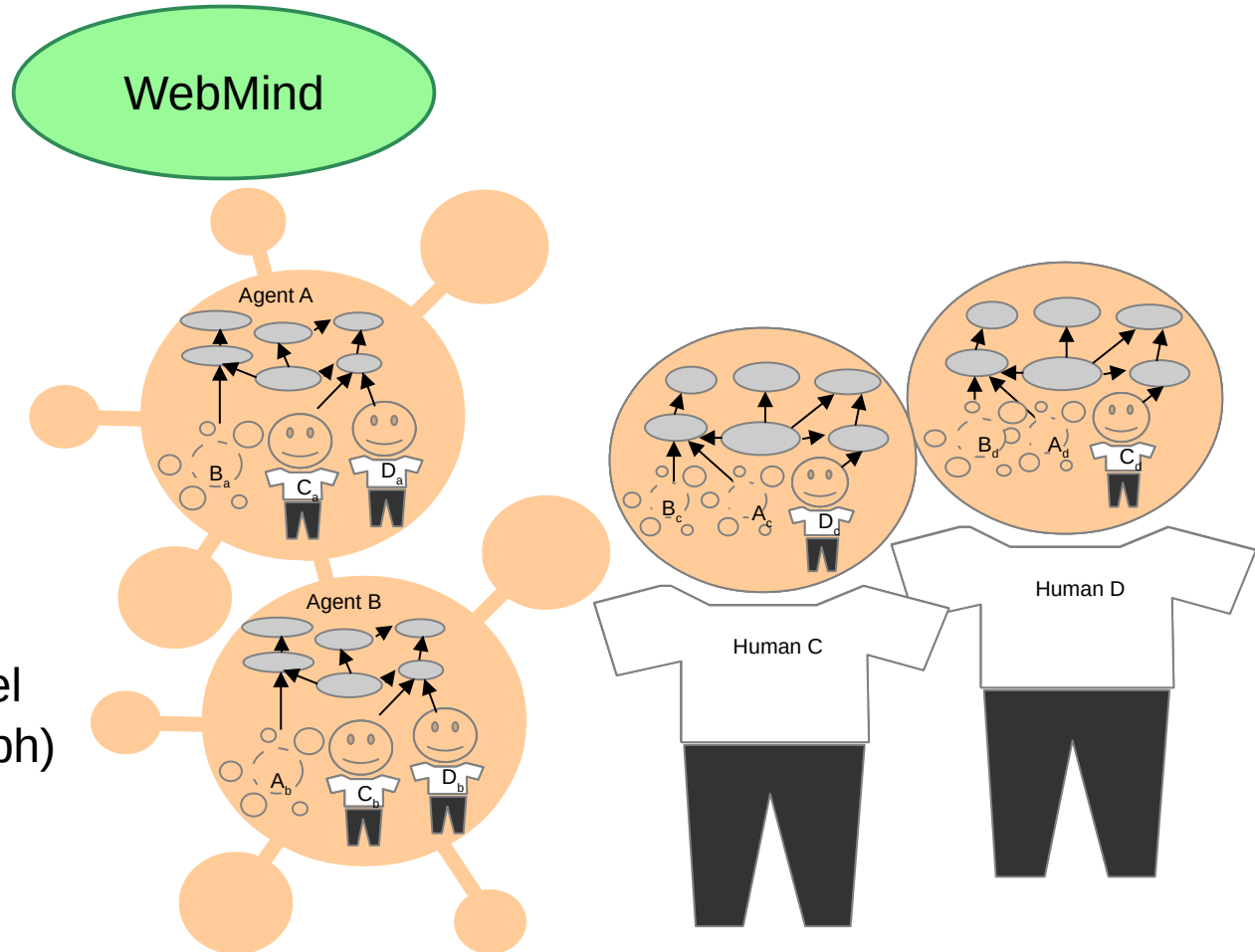
Telegram: akolonin



SingularityNET



Reputation System 1999-2001



Personal WebMind

Collaborative Filtering

Artificial Psychology

Compassion-based “Psyche” Model
(based on social/mental hyper-graph)

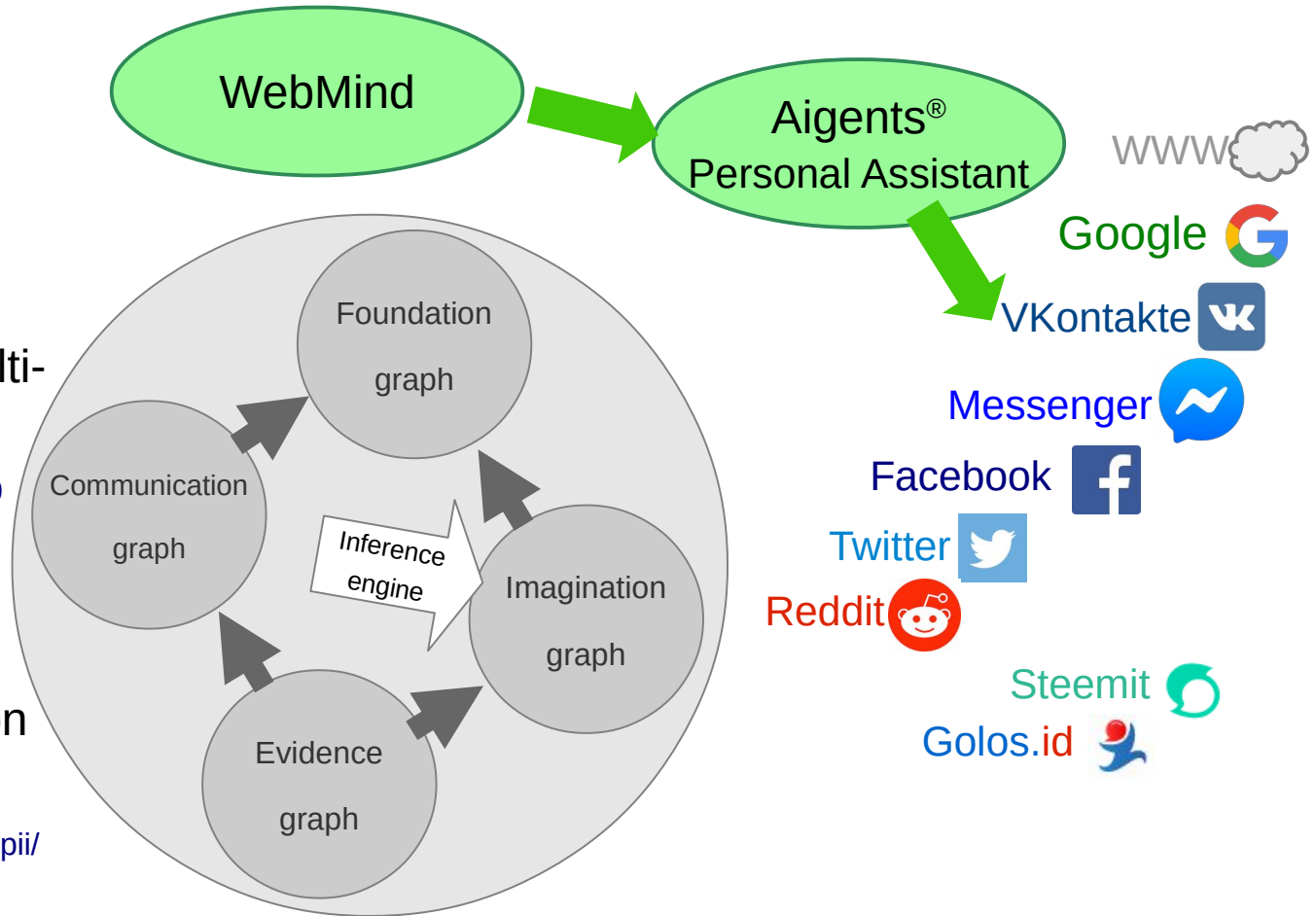
Reputation System 1999-2016

Computable cognitive model
based on social evidence and
restricted by resources:
Applications for personalized
search and social media in multi-
agent environments

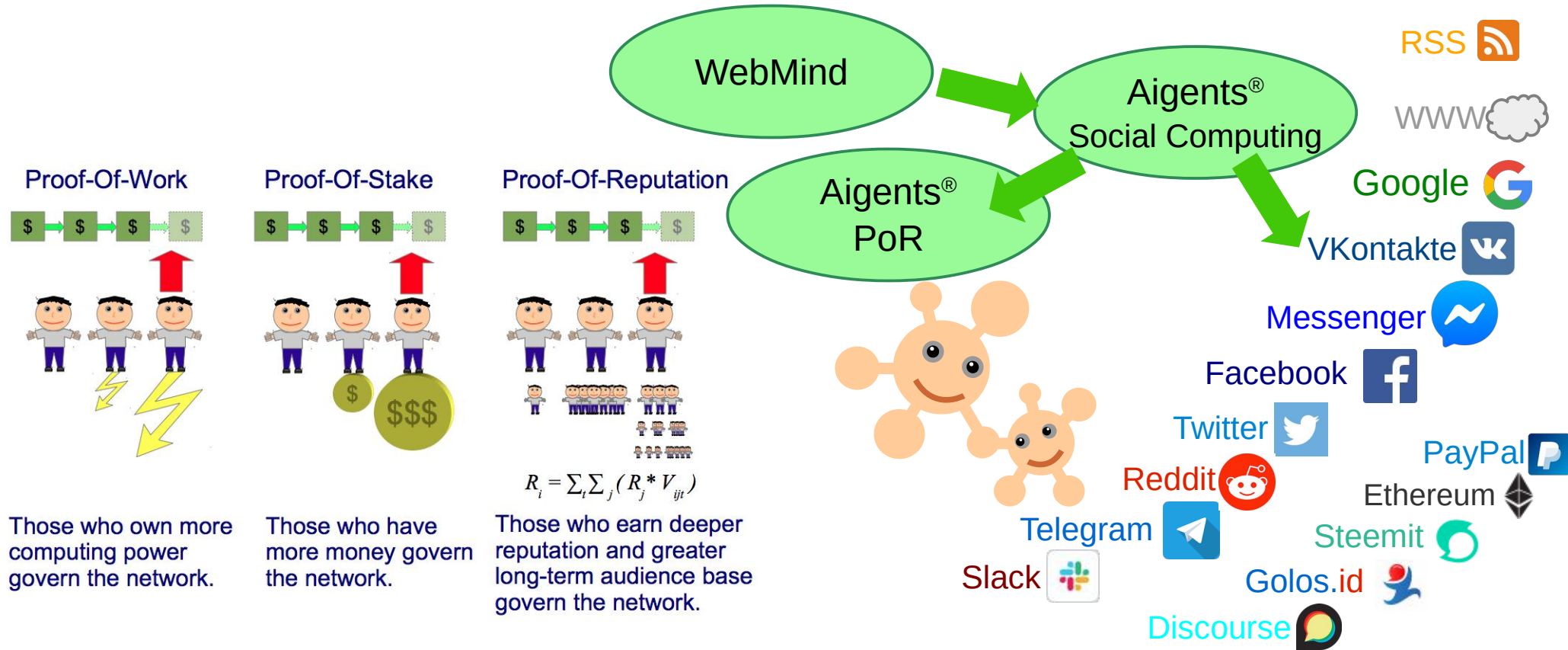
<https://ieeexplore.ieee.org/document/7361869>

Cognitive Architecture of
Collective Intelligence Based on
Social Evidence

<https://www.sciencedirect.com/science/article/pii/S1877050916317239>



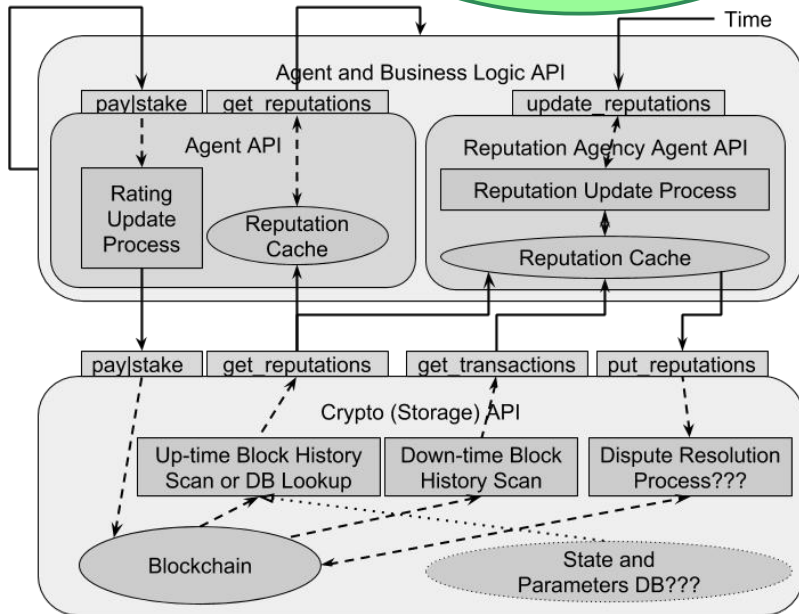
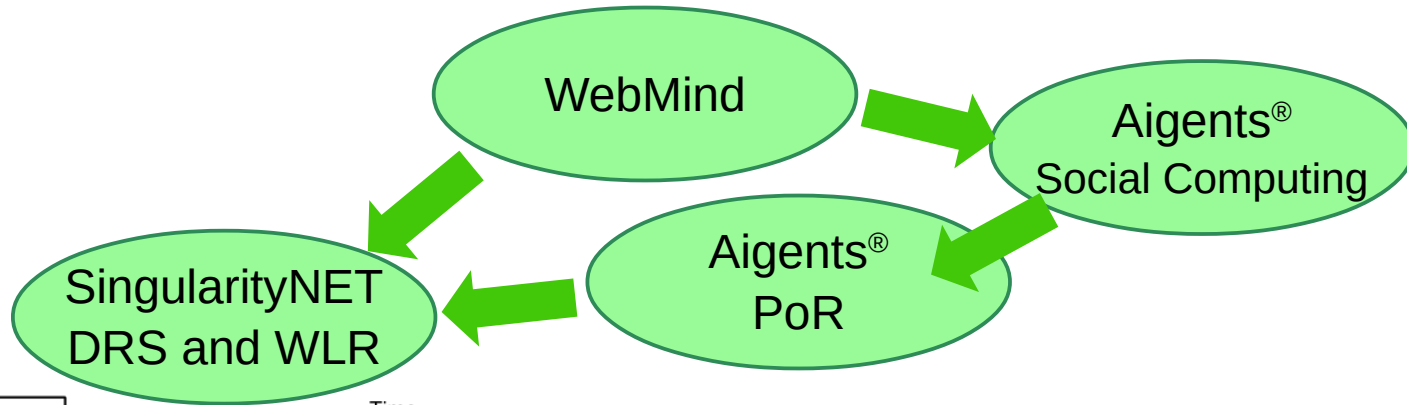
Reputation System 1999-2017



<https://steemit.com/blockchain/@aigents/proof-of-reputation-as-liquid-democracy-for-blockchain>

<https://ieeexplore.ieee.org/document/8109887>

Reputation System 1999-2018



Decentralized Reputation System (DRS) and Reputation Agency Design

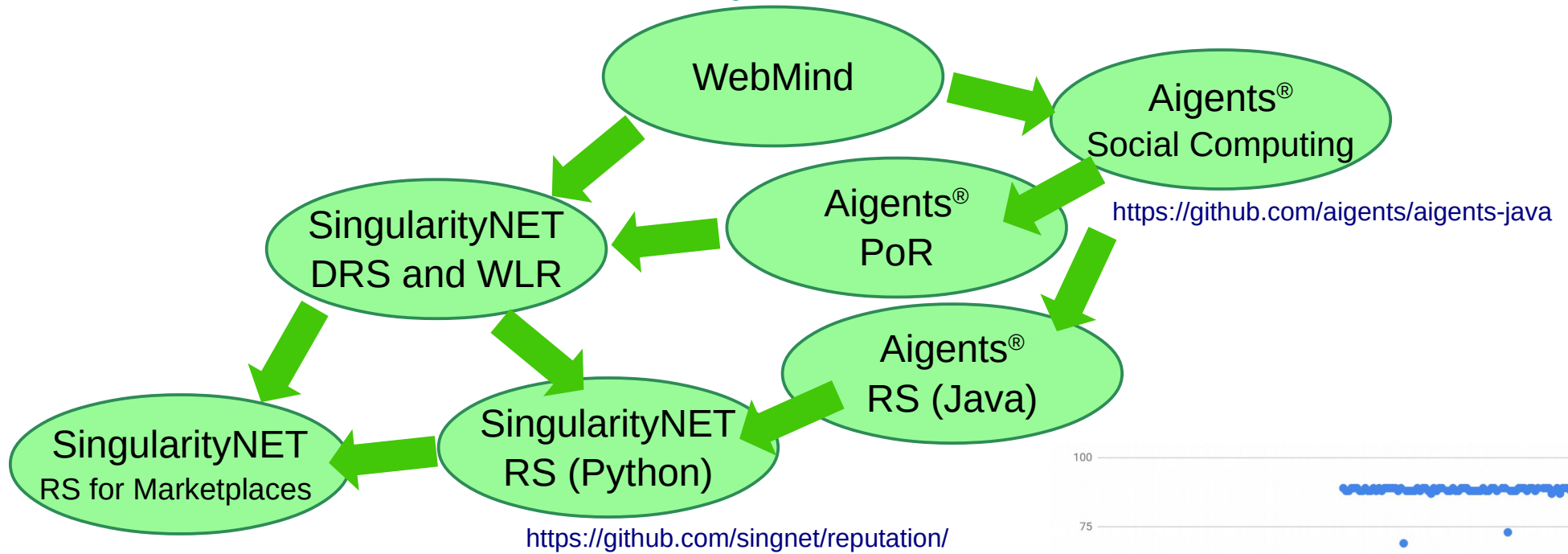
<https://blog.singularitynet.io/reputation-system-design-for-singularitynet-8b5b61e8ed0e>

<https://arxiv.org/abs/1806.07342>

Weighted Liquid Rank (WLR) Reputation Algorithm

<https://arxiv.org/abs/1806.07342>

Reputation System 1999-2019



Using Reputation System for protection from scam
identifying dishonest suppliers on online marketplaces

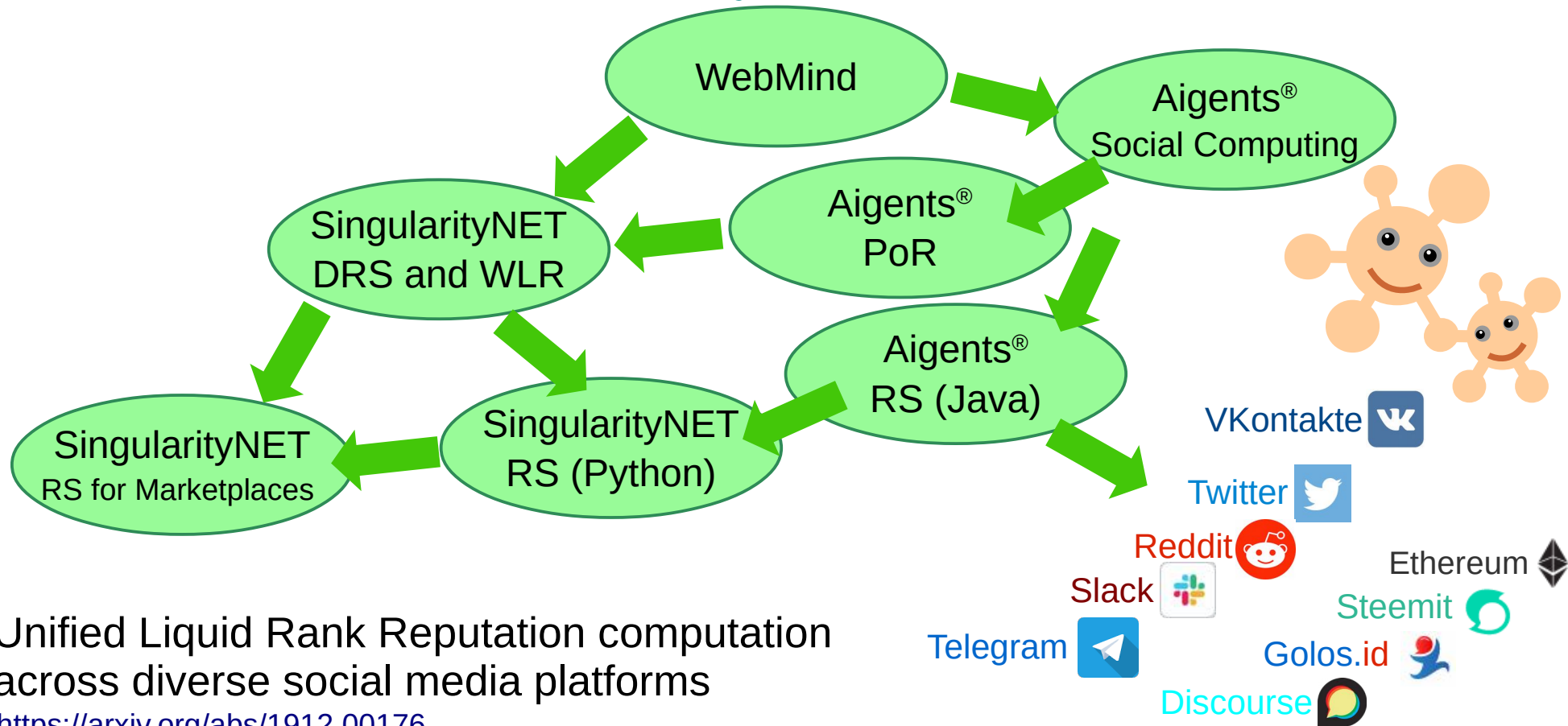
<https://arxiv.org/pdf/1905.08036.pdf>

<https://blog.singularitynet.io/minimizing-recommendation-fraud-7dabbee8fc00>

https://aiforgood2019.github.io/papers/IJCAI19-AI4SG_paper_28.pdf



Reputation System 1999-2020

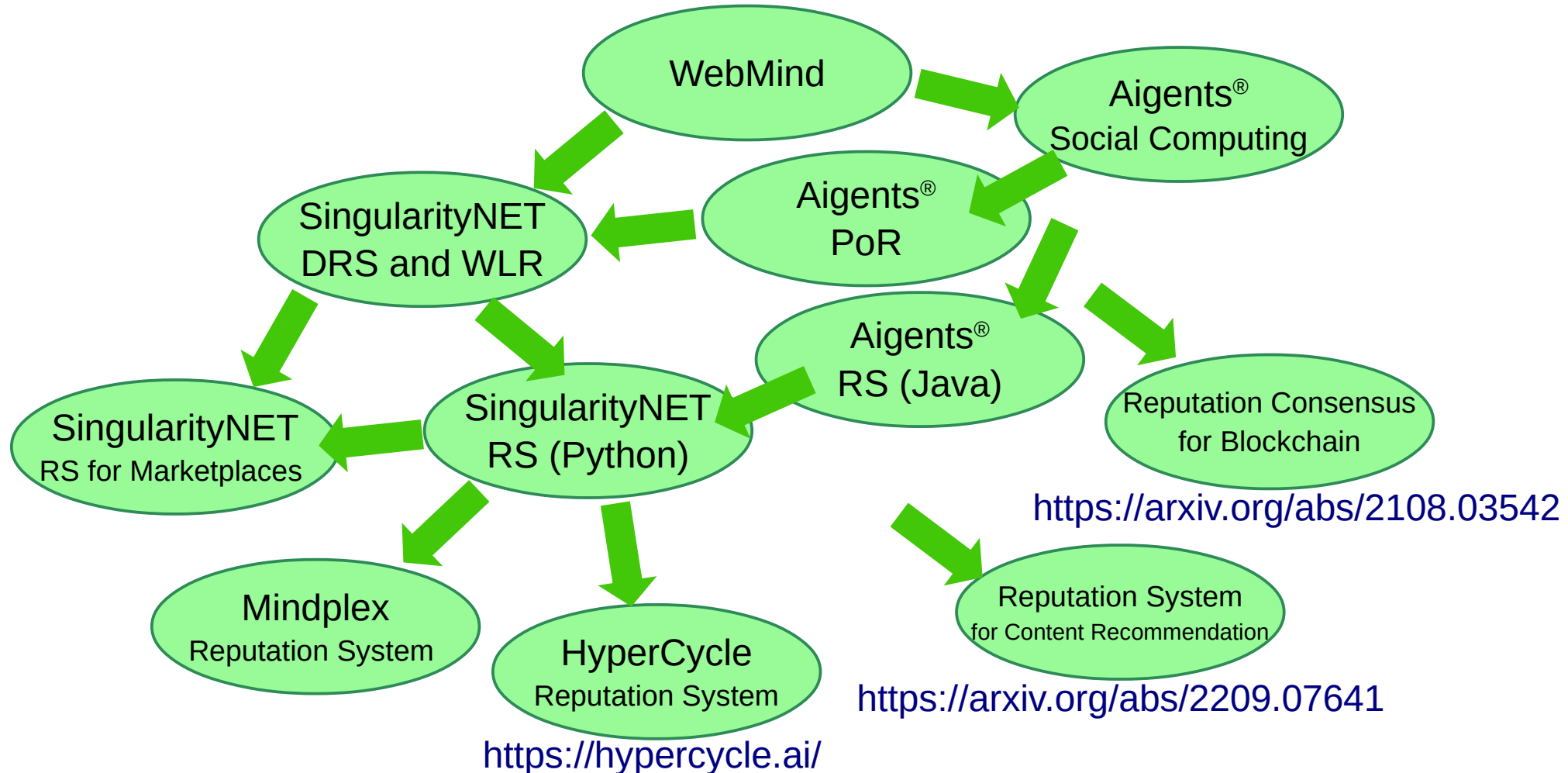


Unified Liquid Rank Reputation computation
across diverse social media platforms

<https://arxiv.org/abs/1912.00176>

<https://aigents.medium.com/aigents-bot-for-telegram-groups-1dba32140047>

Reputation System 1999-2022



Reputation System 2017-2021

Reputation Consensus for Blockchain

International Journal of Network Security & Its Applications (IJNSA) Vol.13, No.4, July 2021

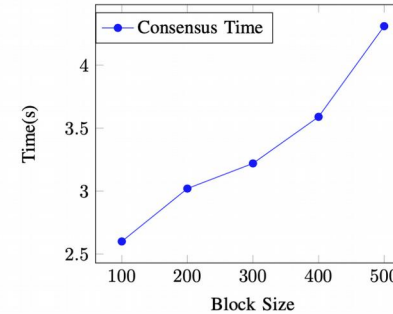


Figure 3: Consensus Time as the number of transactions in a single Block is varied

Table 1 shows the performance of our scheme against other existing consensus mechanisms.

Under certain conditions when the number of participating nodes is increased, our scheme can achieve up to 1,100 transactions per second.

Table 1. Comparison with other consensus mechanisms

Consensus Mechanism	Throughput(TPS)
Proof-of-Work	7
Proof-of-Stake	60
Proof-of-Reputation(Baseline)	800
Proof-of-Burn	854
Proof-of-Reputation	1,100

PROOF-OF-REPUTATION: AN
ALTERNATIVE CONSENSUS MECHANISM
FOR BLOCKCHAIN SYSTEMS

<https://arxiv.org/abs/2108.03542>

<https://aircconline.com/ijnsa/V13N4/13421ijnsa03.pdf>

Reputation System 2017-2022

Reputation System
for Content Recommendation

RESULTS QUALITATIVE ANALYSIS: DECISION SUPPORT

Application of Liquid Rank
Reputation System for Content
Recommendation

<https://arxiv.org/abs/2209.0764>

<https://ieeexplore.ieee.org/document/9923352>

