## **Measure Granularity Draft 1**

#### Introduction

In the 'proof of' paper a measure of an event taking place was addressed. Even if there is certainty an event took place and can be repeated many times to give the same results, this means nothing if there is no notion of the granularity of measurement. This means the scale of precision of recording and extracting meaning from the data needs to be made available to the network too.

## **Set Theory Mathematics**

Fuzzy/rough set theory, probability set theory i.e. deals with incompleteness of both proof and granularity.

#### **Peer Set Theory Number**

Returned from calculating the esseCoin probability equation.

#### **Network Set Theory Number**

Sum of all peer probabilities in the network.

#### **Network approved**

When a probability is proven by the network to hold true i.e. a probability of 1 then the first digit in the individuals peer is incremented by one along with the total network count.

#### EsseCoin-Blockchain

Each entry on the blockchain is a probability ie. Between 0 and 1.

## How to build a esseCoin probability

proof of probability \* granularity probability

## **Proof of Probability Calculation**

Context information in range of all contexts live or possible in the network.

## **Granularity Probability Calculation**

A probability score per sensor given range of measurement in all sensors in the network.

## Setting esseCoin probability in a self contract todo

## Setting esseCoin probablity in a peer to peer contract todo

## Example

Peer1 4.56545 This peer has 4 knowledge credits to their name

Peer 2 343.3434 This person has added a lot to the network e.g. Albert Einstein.

Network 3434343.232323232 The entire network has 3434343 with a probability that they are reality of 23%.

# Three C's

# Contract, context, computation

# **Univeral measure of granularity**

Could a third party exchange system provide a peer to peer rating of the graulairy of each sensor in the market?

Seed knowledge, individuals and app builders for the blockchain – decentralised wolframalpha but applicable to own data.