## **DSCE Theory: Digital Scent Comparison Engine**

### 1. Introduction

DSCE (Digital Scent Comparison Engine) is a theoretical model designed to analyze and predict interactions between two groups of digital wolves, where each wolf emits a binary-coded scent representing behavioral traits. This theory aims to simulate interactions based on scent similarity and derive boolean outcomes (e.g., approach or retreat).

# 2. Core Concepts

- Each digital wolf has a 24-bit binary scent code.
- A group consists of 10 wolves.
- Two groups (Group A and Group B) are placed in a virtual environment.
- Based on scent interactions, a result (True/False) is recorded.
- A dataset of such interactions (e.g., 1000 records) forms the training base.

## 3. Objective

The goal is to train an analytical model or rule-based engine that can:

- Predict the outcome (boolean) of new unseen group combinations.
- Analyze the contribution of individual wolves based on position, neighboring scents, and historical data.
- Propose a reduced symbolic system for efficient processing and learning.

### 4. Mathematical Vision

The DSCE aims to approximate the behavioral impact of each wolf using dimensional analysis:

FN = f(position, neighbors, opposing group, outcome)

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Where FN is a multi-dimensional representation of each wolf's influence in the result.

Over time, FN values can be compared and evolved.

## 5. Ownership

This document represents the intellectual conception of DSCE by the author. Date: 2025-07-11 13:22:42.

It is intended to establish a timestamped record of innovation.