

INTELLECTUAL PROPERTY REGISTRATION CERTIFICATE

Intelligent Resource Allocation Technique (IRAT) Patent Documentation

CERTIFICATE OF INTELLECTUAL PROPERTY REGISTRATION

WHEREAS, Nexus Intelligent Systems, Inc., a Delaware corporation with principal offices at 1200 Technology Park Drive, San Jose, California 95134 (hereinafter "Registrant"), has developed a proprietary Intelligent Resource Allocation Technique (IRAT) with unique algorithmic capabilities;

WHEREAS, the Registrant seeks formal documentation and legal protection for its innovative technological methodology;

NOW, THEREFORE, this Intellectual Property Registration Certificate memorializes the following:

1. INTELLECTUAL PROPERTY DETAILS

1 Technique Designation: Intelligent Resource Allocation Technique (IRAT)

2 Unique Identifier: NIS-IP-2024-0037

3 Primary Technological Classification: Predictive Analytics and Machine Learning Optimization

4 Date of Initial Conception: September 14, 2022

5 Primary Inventors:

a) Dr. Elena Rodriguez

b) Michael Chen

c) Dr. Alexander Petrov

2. TECHNICAL DESCRIPTION

1 Technique Overview

The Intelligent Resource Allocation Technique represents a novel algorithmic approach to dynamic computational resource management, specifically designed for enterprise-scale predictive maintenance and operational optimization systems.

2 Core Technological Innovations

a) Adaptive machine learning predictive modeling

- b) Real-time computational resource redistribution
- c) Probabilistic performance optimization framework

3 Technological Specifications

- Algorithmic Complexity: $O(n \log n)$
- Machine Learning Model: Ensemble gradient boosting with neural network integration
- Scalability: Horizontally and vertically scalable across distributed computing environments

3. INTELLECTUAL PROPERTY RIGHTS

1 Ownership

All intellectual property rights, including but not limited to patents, copyrights, trade secrets, and derivative works, are exclusively owned by Nexus Intelligent Systems, Inc.

2 Territorial Coverage

- a) United States Patent and Trademark Office
- b) European Patent Office
- c) World Intellectual Property Organization (WIPO) International Registration

3 Patent Application Details

- Provisional Patent Application Number: 63/456,789
- Filing Date: December 15, 2023
- Anticipated Full Patent Examination: Q2 2024

4. RESTRICTIONS AND LIMITATIONS

1 Confidentiality

This technique and associated documentation are considered proprietary trade secret information. Unauthorized disclosure, reproduction, or utilization is strictly prohibited.

2 Usage Restrictions

Commercial deployment of the IRAT methodology is exclusively permitted through direct licensing agreements with Nexus Intelligent Systems, Inc.

5. CERTIFICATION OF AUTHENTICITY

We, the undersigned, hereby certify that the foregoing Intelligent Resource Allocation Technique

represents an original technological innovation developed by Nexus Intelligent Systems, Inc.

EXECUTION

IN WITNESS WHEREOF, the authorized representatives of Nexus Intelligent Systems, Inc. execute this Intellectual Property Registration Certificate:

Dr. Elena Rodriguez

Chief Executive Officer

Nexus Intelligent Systems, Inc.

Date: January 22, 2024

Michael Chen

Chief Technology Officer

Nexus Intelligent Systems, Inc.

Witnessed By:

Corporate Legal Counsel

[Corporate Seal]