ICE DETECTION ALGORITHM COPYRIGHT DOCUMENTATION

ICE DETECTION ALGORITHM COPYRIGHT D

Document Reference: PDR-IP-2023-0142

Effective Date: January 11, 2024

Version: 3.1

Classification: CONFIDENTIAL

1. COPYRIGHT REGISTRATION DETAILS

1. **Copyright Title:** BlueCore(TM) Ice Detection and Surface Analys

2. **Registration Number:** TXu 2-285-491

-

Registration Date: September 15, 2023

-

Nation of First Publication: United States of America

-

Year of Completion: 2023

3. **Copyright Owner:**

Polar Dynamics Robotics, Inc.

2850 Glacier Way

Wilmington, DE 19801

2. ALGORITHM DESCRIPTION AND SCOPE

1. The Algorithm comprises proprietary computer code and mathemat

a) Real-time detection of ice formation on robotic surfaces

b) Analysis of surface friction coefficients in sub-zero environments

c) Predictive modeling of ice accumulation patterns

d) Autonomous navigation adjustment protocols for icy conditions

2. **Core Components:**

-

Surface temperature mapping module (v4.2)

-

Multi-spectral imaging analysis system

-

Machine learning ice pattern recognition framework

-

Friction coefficient calculation engine

Environmental condition correlation database

3. **Technical Specifications:**

-

Programming Language: C++, Python

-

Framework Version: BlueCore(TM) 3.5

-

Database Structure: Proprietary NoSQL

-

Processing Requirements: Documented in Appendix A

3. AUTHORSHIP AND OWNERSHIP

1. **Original Authors:**

-

Dr. James Barrett, Chief Robotics Officer

-

Dr. Elena Frost, CEO

-

Robotics Development Team (See Schedule 1)

2. **Assignment of Rights:**

All authors have executed work-for-hire agreements dated prior to Alg

development, transferring all rights, title, and interest to Polar Dynami

Robotics, Inc.

3. **Third-Party Components:**

No third-party libraries or open-source components are incorporated i

core Algorithm functionality.

4. PROTECTION MEASURES

1. **Technical Protection:**

-

Encrypted source code repository

-

Secure cloud storage with multi-factor authentication

-

Version control system with access logging

-

Compilation into protected binary format

2. **Administrative Controls:**

Need-to-know access restrictions

-

Employee confidentiality agreements

-

Secure development environment

-

Regular security audits

5. LICENSING AND USE RESTRICTIONS

1. The Algorithm is proprietary technology of Polar Dynamics Robotics

a) Reverse engineered

b) Decompiled

c) Modified

d) Distributed

e) Sublicensed

2. **Authorized Usage:**

-

Internal development and testing

-

Integration into Polar Dynamics Robotics products

-

Customer deployment as compiled binary only

-

Research and improvement activities by authorized personnel

6. DERIVATIVE WORKS

1. All improvements, modifications, and derivative works based on the

2. **Documentation Requirements:**

-

All modifications must be logged in the central development database

-

Change documentation must include author, date, and purpose

-

Version control system must maintain complete history

7. CONFIDENTIALITY

1. The Algorithm and all related documentation are classified as Trade

2. **Disclosure Restrictions:**

No public disclosure of algorithmic details

-

Limited API documentation for integration purposes only

-

Confidentiality agreements required for all accessing parties

8. CERTIFICATION

The undersigned hereby certifies that this documentation accurately r
copyright status and protection measures for the Algorithm as of the E
Date.

```

POLAR DYNAMICS ROBOTICS, INC.

**By:** _ - 10 -

Victoria Wells

Chief Financial Officer


Date: January 11, 2024


WITNESSED BY:


_

Corporate Counsel

```


9. REVISION HISTORY

Version | Date | Description | Approved By

---|---|---|---

0 | 2023-09-15 | Initial documentation | E. Frost

0 | 2023-10-30 | Updated technical specifications | J. Barrett

0 | 2023-12-15 | Added protection measures | V. Wells

1 | 2024-01-11 | Updated certification | Legal Dept.