SENSOR DATA PROCESSING PIPELINE GUIDE

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NaviFloor Robotics, Inc.

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Classification: CONFIDENTIAL - Internal Use Only

1. INTRODUCTION AND SCOPE

1. This Sensor Data Processing Pipeline Guide ("Guide") establishes

2. This Guide applies to all sensor data collected through the Compan

2. DEFINITIONS

1. "Raw Sensor Data" means unprocessed data streams from Compa

2. "Processed Data" means any derivative data products resulting fro

3. "Pipeline Infrastructure" means the complete technical stack respor

3. DATA COLLECTION PARAMETERS

1. Authorized Sensor Types

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Model NF-LiDAR-2000 LiDAR Arrays

Depth-Master Pro(TM) Sensors

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TerrainSense(TM) Surface Analysis Modules

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NaviCore(TM) Positional Tracking Units

2. Collection Frequency

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Primary LiDAR scanning: 240Hz

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Depth sensing: 120Hz

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Surface analysis: 60Hz

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Positional data: 500Hz

4. PROCESSING REQUIREMENTS

1. Raw Data Processing

a) All Raw Sensor Data must be processed through Company's NaviC

Processing Pipeline v4.2 or later

b) Processing must occur on Company-approved secure computing in

c) Minimum processing requirements:

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Point cloud density normalization

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Noise reduction filtering

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Surface pattern recognition

Terrain classification

2. Data Validation

a) Automated validation checks must be performed on all Processed

b) Validation parameters must meet minimum accuracy thresholds as
Schedule A

c) Failed validations must trigger immediate notification to authorized
personnel

5. STORAGE AND RETENTION

1. Raw Sensor Data shall be retained for:

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Active operations: 30 days

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Diagnostic purposes: 90 days

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Regulatory compliance: 365 days

2. Processed Data shall be retained according to the following schedu

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Terrain maps: 2 years

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Navigation patterns: 1 year

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Performance metrics: 3 years

6. SECURITY REQUIREMENTS

1. All Pipeline Infrastructure must implement:

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AES-256 encryption for data at rest

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TLS 1.3 for data in transit

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Role-based access control (RBAC)

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Automated audit logging

2. Access Controls

a) Only authorized personnel with appropriate clearance may access

Infrastructure

b) Multi-factor authentication required for all access

c) Access logs must be maintained for 180 days

7. COMPLIANCE AND AUDITING

1. Regular Audits

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Monthly security audits

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Quarterly performance reviews

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Annual compliance assessments

2. Documentation Requirements

a) All Pipeline modifications must be documented

b) Change logs must be maintained

c) Audit trails must be preserved for 3 years

8. INTELLECTUAL PROPERTY PROTECTION

1. All Sensor Data and Processed Data shall remain the exclusive pro

2. Processing algorithms and methodologies are protected under U.S

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US 11,234,567 B2

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US 11,345,678 B2

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US 11,456,789 B2

9. DISCLAIMER AND LIMITATION OF LIABILITY

1. This Guide is confidential and proprietary to NaviFloor Robotics, Inc

2. The Company reserves the right to modify this Guide at any time w

3. Nothing in this Guide shall be construed as a warranty of data accu

10. EXECUTION AND IMPLEMENTATION

This Guide is effective immediately upon publication and supersedes

versions.

APPROVED AND ADOPTED:

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