

# **EMPLOYMENT AND COMPENSATION AGREEMENT**

THIS EMPLOYMENT AND COMPENSATION AGREEMENT (this "Agreement") is made and entered into as of January 15, 2024 (the "Effective Date"), by and between NEXUS INDUSTRIAL INTELLIGENCE, INC., a Delaware corporation with its principal place of business at 2500 Innovation Drive, Suite 400, Wilmington, Delaware 19801 (the "Company"), and DR. ALEXANDER PATEL, an individual residing at 127 Technology Circle, Cambridge, Massachusetts 02142 (the "Executive").

## **1.0 PREAMBLE AND RECITALS**

WHEREAS, the Company is engaged in the development and commercialization of proprietary machine learning and computer vision solutions for industrial process optimization and predictive maintenance, including its NexusCore™ Industrial AI Platform (the "Business"), with operations across multiple jurisdictions and industrial sectors;

WHEREAS, the Company desires to employ the Executive as Chief Machine Learning Officer, and the Executive desires to accept such employment with the Company, subject to the terms and conditions set forth herein;

WHEREAS, the Executive possesses unique technical expertise in artificial intelligence and machine learning algorithms specifically applicable to industrial applications, including but not limited to deep learning architectures, neural network optimization, and computer vision systems;

WHEREAS, the Executive has demonstrated exceptional qualifications through prior achievements in the field of industrial artificial intelligence, including published research, patent contributions, and successful implementation of machine learning solutions in manufacturing environments;

WHEREAS, the Company acknowledges that the Executive's specialized knowledge and expertise are essential to advancing the Company's technological capabilities and maintaining its competitive advantage in the industrial artificial intelligence market;

WHEREAS, both parties acknowledge that this Agreement shall be governed by and construed in accordance with the laws of the State of Delaware, without giving effect to any choice of law or conflict of law provisions; and

WHEREAS, the parties desire to enter into this Agreement to define their respective rights and obligations with respect to the Executive's employment by the Company, including compensation, intellectual property rights, and confidentiality obligations.

NOW, THEREFORE, in consideration of the mutual covenants and agreements set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

## **2.0 DEFINITIONS**

2.1 "Confidential Information" means all non-public information, whether in oral, written, or electronic form, relating to the Company's technology, products, business, and operations, including but not limited to: (a) machine learning algorithms, neural network architectures, and training methodologies; (b) computer vision systems and image processing techniques; (c) source code and software architecture; (d) customer data and usage patterns; (e) research and development activities; (f) business strategies and plans; (g) training datasets and data annotation procedures; (h) model optimization techniques and hyperparameter configurations; (i) system performance metrics and benchmarking results; (j) hardware specifications and integration protocols; and (k) any other technical or business information that derives independent economic value from not being generally known.

2.2 "Company Technology" means the NexusCore™ Industrial AI Platform and all related technologies, including: (a) predictive maintenance algorithms; (b) quality inspection systems; (c) process optimization models; (d) edge computing implementations; (e) distributed computing architectures; (f) sensor integration frameworks; (g) real-time data processing systems; (h) user interface components; (i) API specifications and documentation; (j) deployment configurations; and (k) all improvements, modifications, and derivative works thereof.

2.3 "Intellectual Property" means all patents, patent applications, copyrights, trademarks, trade secrets, and other intellectual property rights relating to the Company Technology or arising from the Executive's employment with the Company, including: (a) algorithm implementations; (b) software libraries and components; (c) technical documentation; (d) training materials; (e) configuration files; (f) data preprocessing methods; (g) model architectures; (h) optimization techniques; (i) deployment strategies; and (j) any associated improvements or innovations.

2.4 "Competitive Business" means any business engaged in the development, marketing, or sale of artificial intelligence or machine learning solutions for industrial applications, including but not limited to: (a) predictive maintenance systems; (b) automated quality inspection; (c) industrial process optimization; (d) manufacturing analytics platforms; (e) industrial IoT solutions incorporating AI/ML capabilities; (f) smart factory systems; (g) automated decision support systems; or (h) similar applications of AI/ML technology in manufacturing environments.

2.5 "Derivative Works" means any modification, adaptation, translation, transformation, arrangement, or any other alteration of the Company Technology that would constitute a

copyright infringement if produced without the authorization of the copyright holder, including: (a) enhanced algorithms; (b) modified neural networks; (c) customized interfaces; (d) specialized implementations; or (e) integrated solutions combining Company Technology with other systems.

2.6 "Technical Documentation" means all materials, whether in electronic or physical form, that describe, explain, or detail any aspect of the Company Technology, including: (a) system architectures; (b) API specifications; (c) deployment guides; (d) training manuals; (e) troubleshooting procedures; (f) performance optimization guidelines; and (g) integration protocols.

### **3.0 EMPLOYMENT TERMS AND DUTIES**

#### **3.1 Position and Duties**

(a) The Company hereby employs the Executive as Chief Machine Learning Officer, reporting directly to the Chief Executive Officer.

(b) The Executive shall be responsible for: (i) leading the development of the Company's machine learning architecture and algorithms; (ii) overseeing the AI/ML research team; (iii) ensuring technical excellence in model development and deployment; and (iv) contributing to the Company's technical strategy and intellectual property portfolio.

(c) The Executive's specific responsibilities shall include, without limitation: (i) Developing and implementing strategic roadmaps for machine learning initiatives (ii) Establishing technical standards and best practices for AI/ML development (iii) Managing resource allocation across multiple concurrent AI projects (iv) Collaborating with other C-suite executives on technology integration (v) Representing the Company at industry conferences and technical forums

(d) The Executive shall maintain direct oversight of: (i) Model validation and testing protocols (ii) AI safety and reliability measures (iii) Technical documentation standards (iv) Research team recruitment and development (v) External technical partnerships and collaborations

#### **3.2 Work Location and Schedule**

(a) The Executive's primary work location shall be the Company's headquarters in Wilmington, Delaware, with the option for remote work up to two (2) days per week.

(b) Remote work arrangements shall be subject to: (i) Maintenance of secure communication protocols (ii) Regular availability during core business hours (9:00 AM - 5:00 PM EST) (iii) Physical presence for critical meetings and events (iv) Compliance with Company's Remote Work Policy

(c) The Executive acknowledges that international travel may be required for customer implementations and technical conferences, not to exceed thirty (30) days per calendar year without prior written agreement.

### 3.3 Performance Standards

(a) The Executive shall devote full business time and attention to the Company's business.

(b) Performance evaluation shall be based on: (i) Achievement of quarterly technical milestones (ii) Research team productivity and output (iii) Quality of deployed AI models (iv) Innovation metrics and patent filings (v) Customer satisfaction with AI implementations

(c) The Executive shall maintain: (i) Regular reporting on project status and metrics (ii) Documentation of research findings and methodologies (iii) Technical oversight of all AI/ML initiatives (iv) Professional development of team members

### 3.4 Compliance and Policies

(a) The Executive shall comply with all Company policies, including the Data Protection Policy and Source Code Management Guidelines.

(b) The Executive must maintain all required certifications and security clearances.

(c) Specific compliance obligations include: (i) Adherence to AI Ethics Guidelines and responsible AI development principles (ii) Implementation of bias testing and mitigation procedures (iii) Protection of proprietary algorithms and methodologies (iv) Compliance with data privacy regulations (v) Maintenance of cybersecurity protocols

### 3.5 Technical Oversight and Governance

(a) The Executive shall establish and chair the AI Governance Committee, which shall: (i) Review and approve major AI initiatives (ii) Monitor ethical compliance of AI systems (iii) Assess technical risks and mitigation strategies (iv) Evaluate emerging AI technologies

(b) The Executive shall develop and maintain: (i) Technical documentation standards (ii) Quality assurance protocols (iii) Model validation procedures (iv) Security audit processes

### 3.6 Intellectual Property and Confidentiality

(a) The Executive shall: (i) Protect Company's intellectual property rights (ii) Oversee patent application processes (iii) Maintain confidentiality of proprietary algorithms (iv) Ensure proper documentation of innovations

(b) All AI/ML developments, improvements, and innovations created during employment shall be: (i) Exclusively owned by the Company (ii) Properly documented and protected (iii) Subject to appropriate security measures (iv) Managed according to IP protection protocols

## **4.0 COMPENSATION AND BENEFITS**

### **4.1 Base Salary**

- (a) The Company shall pay the Executive an annual base salary of Three Hundred Fifty Thousand Dollars (\$350,000), payable in accordance with the Company's standard payroll practices and subject to applicable withholdings and deductions.
- (b) The base salary shall be reviewed annually and may be increased based on performance and market conditions, provided that any such increase shall become the new base salary for all purposes under this Agreement.
- (c) The Company shall not reduce the Executive's base salary without the Executive's prior written consent, except as part of a general salary reduction applicable to all senior executives of the Company.

### **4.2 Equity Compensation**

- (a) The Executive shall be granted an option to purchase 100,000 shares of the Company's common stock (the "Option") pursuant to the Company's 2023 Stock Option Plan.
- (b) The Option shall vest over four (4) years, with 25% vesting on the first anniversary of the Effective Date and the remainder vesting in equal monthly installments thereafter.
- (c) The exercise price per share shall be equal to the fair market value per share on the date of grant, as determined by the Board of Directors.
- (d) In the event of a Change in Control (as defined in Section 7.0), all unvested Options shall immediately vest and become exercisable.
- (e) The Executive shall be eligible for additional equity grants at the Board's discretion, based on performance and market conditions.

### **4.3 Performance Bonus**

- (a) The Executive shall be eligible for an annual performance bonus of up to 40% of base salary based on achievement of specified technical and business objectives.
- (b) Bonus criteria shall include: (i) successful deployment of new ML models; (ii) patent filings; and (iii) customer satisfaction metrics.
- (c) The specific performance metrics and weightings shall be established by the Board within the first 60 days of each fiscal year.
- (d) The bonus shall be paid no later than March 15 of the year following the year in which it was earned.
- (e) The Executive must be employed on the bonus payment date to receive the bonus, except as otherwise provided in Section 6.0.

### **4.4 Benefits Package**

The Executive shall be entitled to participate in all employee benefit plans, including:

- (a) Health, dental, and vision insurance, with coverage beginning on the first day of employment. The Company shall pay 90% of premium costs for the Executive and eligible dependents.
- (b) 401(k) plan with Company matching of 100% of the first 4% of eligible compensation contributed by the Executive.
- (c) Life and disability insurance, including: (i) Term life insurance with coverage equal to 2x annual base salary (ii) Short-term disability coverage at 66.67% of base salary (iii) Long-term disability coverage at 60% of base salary
- (d) Paid time off per Company policy, including: (i) Twenty (20) days of paid vacation annually (ii) Ten (10) paid holidays per year (iii) Five (5) paid sick days annually (iv) Twelve (12) weeks of paid parental leave

#### 4.5 Additional Benefits

- (a) Annual professional development allowance of \$5,000 for conferences, training, and education.
- (b) Monthly technology allowance of \$150 for personal device usage.
- (c) Reimbursement of reasonable business expenses in accordance with Company policy.
- (d) Annual executive health screening and wellness program participation.

#### 4.6 Review and Adjustment

- (a) The entire compensation package shall be reviewed annually by the Board.
- (b) Any modifications to compensation or benefits shall be documented in writing and signed by both parties.
- (c) The Company reserves the right to modify, amend, or terminate any benefit plan, provided such changes apply uniformly to all senior executives.

## **5.0 INTELLECTUAL PROPERTY AND INVENTIONS**

### 5.1 Assignment of Inventions

- (a) The Executive hereby assigns to the Company all right, title, and interest in any Intellectual Property conceived, developed, or reduced to practice during employment, including but not limited to inventions, discoveries, improvements, processes, formulas, techniques, know-how, and data, whether or not patentable.
- (b) This assignment includes all machine learning models, algorithms, and technical innovations related to the Company Technology, encompassing: (i) Neural network architectures and configurations (ii) Feature engineering methodologies (iii) Data

preprocessing techniques (iv) Model optimization strategies (v) Deployment frameworks and infrastructure (vi) Performance monitoring systems

(c) The Executive acknowledges that any Intellectual Property created using Company resources, during Company time, or within the scope of employment shall be considered "work made for hire" under applicable copyright laws.

## 5.2 AI Algorithm Ownership

(a) All artificial intelligence and machine learning algorithms developed by the Executive shall be the exclusive property of the Company, including: (i) Model architectures and structural designs (ii) Training methodologies and procedures (iii) Optimization techniques and parameters (iv) Implementation approaches and strategies (v) Hyperparameter configurations (vi) Custom loss functions and metrics (vii) Ensemble methods and combinations

(b) The Executive shall maintain detailed documentation of all algorithmic development, including: (i) Design specifications and rationale (ii) Development history and iterations (iii) Performance benchmarks and metrics (iv) Training data specifications (v) Implementation guidelines

## 5.3 Patent Rights

(a) The Executive shall cooperate fully in the preparation and prosecution of patent applications, including: (i) Providing technical documentation and explanations (ii) Reviewing patent applications and office actions (iii) Executing necessary documents (iv) Participating in inventor interviews (v) Assisting with prior art searches

(b) The Company shall have the exclusive right to file patents on any inventions assigned under this Agreement, including: (i) Utility patents (ii) Design patents (iii) Provisional applications (iv) International patent applications (v) Continuation applications

(c) The Executive shall promptly disclose to the Company all potentially patentable inventions and maintain appropriate records of conception and reduction to practice.

## 5.4 Open Source Software

(a) The Executive shall comply with the Company's Open Source Software Policy, which includes: (i) Obtaining written approval before incorporating any open source components (ii) Maintaining detailed records of all open source usage (iii) Ensuring compliance with license requirements (iv) Conducting regular code audits (v) Documenting all third-party dependencies

(b) No open source software may be incorporated into Company Technology without prior approval from: (i) The Chief Technology Officer (ii) The Legal Department (iii) The Open Source Review Board

## 5.5 Confidentiality and Protection

(a) The Executive shall take all reasonable precautions to protect the Company's Intellectual Property, including: (i) Maintaining secure development environments (ii) Using encryption for sensitive data (iii) Following security protocols (iv) Restricting access to authorized personnel

(b) The Executive shall not disclose any Intellectual Property to third parties without explicit written authorization.

#### 5.6 Post-Employment Obligations

(a) Upon termination of employment, the Executive shall: (i) Return all materials containing Intellectual Property (ii) Provide complete documentation of ongoing development (iii) Assist in the transition of projects (iv) Continue to maintain confidentiality (v) Cooperate in intellectual property protection efforts

(b) The Executive's obligation to assign Intellectual Property shall survive termination of employment for any developments that were conceived during employment.

#### 5.7 Dispute Resolution

(a) Any disputes regarding Intellectual Property ownership shall be resolved through: (i) Internal review process (ii) Mediation (iii) Binding arbitration (iv) Legal proceedings as necessary

(b) The Company shall have the right to seek injunctive relief to prevent unauthorized use or disclosure of Intellectual Property.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the Effective Date.

NEXUS INDUSTRIAL INTELLIGENCE, INC.

By: \_\_\_\_\_ Name: Dr. Sarah Chen Title: Chief Executive Officer

EXECUTIVE:

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Dr. Alexander Patel

[EXHIBITS AND APPENDICES TO FOLLOW]