

Chatake Innoworks Pvt. Ltd.

Corporate Profile & Vision 2025–2028

Engineering Ideas. Empowering Innovation.

A family-rooted innovation company leveraging AI, Software, EdTech, and Agri-intelligence to connect academia and industry.

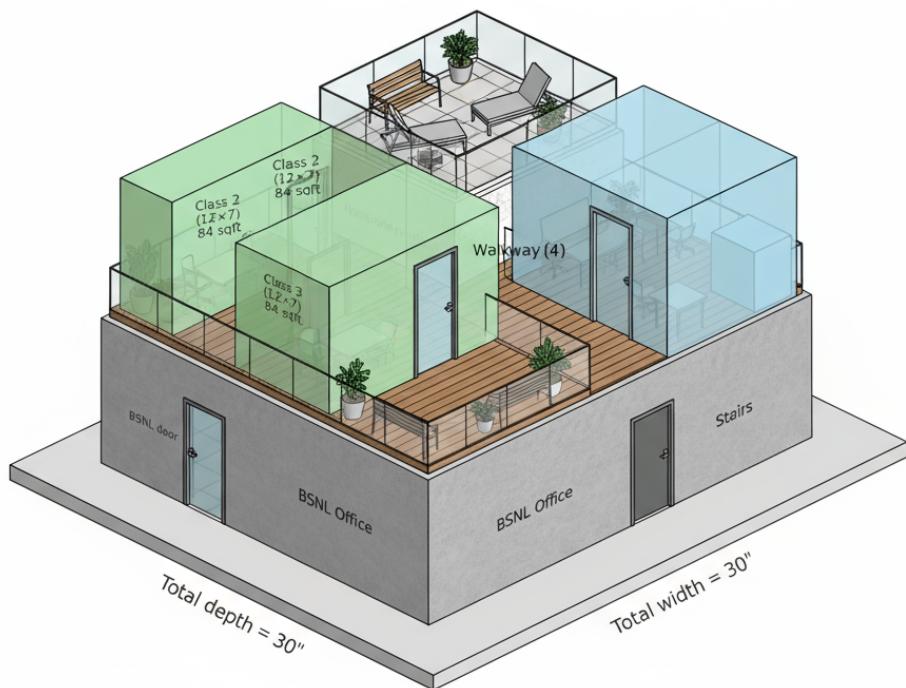


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Managing Director's Foreword

Akash S. Chatake, M. Tech AI & ML, BITS Pilani

When we embarked on this journey, we had a simple yet profound vision: "AI begins at home." This principle has guided us from our humble beginnings as an academic initiative to becoming a comprehensive corporate entity that bridges education, technology, and sustainable innovation.

As Managing Director, I am proud to present Chatake Innoworks Pvt. Ltd. as more than just a technology company. We are a family-rooted innovation ecosystem that demonstrates how artificial intelligence and machine learning can serve humanity while creating lasting value for our communities.

Our four strategic divisions—MindforgeAI, CodeSmith Systems, EduSphere, and Chatake GreenWorks—work synergistically to address the most pressing challenges of our time: educational transformation, sustainable agriculture, digital infrastructure, and environmental stewardship.

Through our collaborative approach to innovation, we have shown that the most impactful technologies emerge when academic excellence meets practical application, when family values guide corporate governance, and when human empowerment remains at the center of every technological advancement.

This corporate profile represents not just our current capabilities, but our commitment to building a future where technology serves humanity, where innovation creates opportunity, and where education remains the foundation of all meaningful progress.

— **Akash S. Chatake**

[M. Tech AI & ML, BITS Pilani]

Managing Director

Assistant Managing Director's Message

Dr. Vikram S. Chatake, M. Tech, Ph.D. (ICT), Post-Doc (NTU, Singapore)

As Assistant Managing Director for Technical & Research, I am honored to lead our technical and research initiatives that form the backbone of our innovation ecosystem. Our commitment to research excellence, combined with our practical focus on real-world applications, positions Chatake Innoworks at the forefront of India's technological revolution.

Our research programs, including the MindforgeAI Innovation Research Fellowship (MIRF) and our comprehensive Research & Innovation Associates program, demonstrate our dedication to nurturing the next generation of technology leaders while advancing the frontiers of artificial intelligence, machine learning, and sustainable technology solutions.

Through projects like Apollo (agricultural intelligence), Entropy Studies in Neural Networks, and our Architectural Language Development, we are not just creating products—we are building knowledge systems that will benefit researchers, practitioners, and communities for generations to come.

Our international collaborations and academic partnerships ensure that our work maintains the highest standards of scientific rigor while addressing the practical needs of our society. We believe that true innovation occurs at the intersection of academic research and industrial application, and our success demonstrates the power of this integrated approach.

— **Dr. Vikram S. Chatake**

M.Tech, Ph.D. (ICT), Post-Doc (NTU, Singapore)

Assistant Managing Director (Technical & Research)

Company Overview & Philosophy

Legal Name: Chatake Innoworks Private Limited

Tagline: Engineering Ideas. Empowering Innovation.

Headquarters: Solapur-Pune, Maharashtra, India

Incorporation: Registered under the Companies Act, 2013

Legal Advisor: Adv. Mahesh Jagtap, Solapur District Session Court

Corporate Philosophy

Chatake Innoworks Private Limited represents a pioneering family-rooted innovation company that seamlessly integrates Artificial Intelligence, Software Development, Educational Technology, and Agricultural Intelligence. Founded on the principle that "AI begins at home," our company embodies the transformation from classroom education to corporate innovation.

Our corporate philosophy centers on human-centered technology development, where cutting-edge AI and machine learning solutions are designed not to replace human intelligence but to amplify it. Through our comprehensive ecosystem, we bridge academic excellence with industrial application, creating solutions that serve education, industry, agriculture, and environmental stewardship.

Core Values

- Educational Excellence: Every innovation must contribute to human learning and development
- Family-Centered Governance: Family values guide our corporate decisions and culture
- Sustainable Innovation: Technology must serve long-term environmental and social goals
- Collaborative Research: The best solutions emerge from interdisciplinary collaboration
- Ethical AI: Artificial intelligence must enhance human dignity and capability

Board of Directors

- Shivadas B. Chatake **Chairman & President**
B.Sc., B.Ed. | Strategic leadership and corporate governance oversight
- Vijaya S. Chatake **Vice-Chairman & Finance Head**
Matriarch & Financial Custodian | Financial wisdom and maternal guidance to the organization
- Pratap C. Patil (Chatake) **Director – Industry & Infrastructure**
B.E. (Chemical), Deputy Chief Engineer, Maire Tecnimont ICB, Mumbai | Industrial engineering and infrastructure development expertise
- Pravin Vijay Fate **Director – Operations & IT Systems**
B. Tech (E&TC) | Operational excellence and IT systems integration
- Priyanka A. Chatake **Director – Academic & Outreach**
M.Sc. (Physics), B.Ed. | Academic initiatives and outreach programs leadership
- Dr. Rutuja V. Chatake **Director – Chemical AI Applications**
M.Tech, Ph.D. (ICT – Chemical Technology) | AI in chemical & industrial processes
- Dhartee P. Fate **Employee Representative (Board Member)**
B. Tech (E&TC) | Employee interests' representation and operational insights
- Dr. Vikram S. Chatake **Assistant Managing Director (Tech. & Research)**
M.Tech, Ph.D. (ICT), Post-Doc (NTU, Singapore) | Tech. & research leadership
- Akash S. Chatake **Managing Director**
M.Tech AI & ML, BITS Pilani | Operational leadership and strategic direction

Advisory Board

- Prof. Gajanan R. Dharane
Principal, Shri Siddheshwar Women's Polytechnic, Solapur
- Hon. Mr. Shailendra Jadhav
Senior Systems Engineer, Global IT Consultant
- Dr. Deepti Shailendra Jadhav
Ph.D. (IT), Assistant Professor – RAIT, Navi Mumbai

Organizational Structure

CHATAKE INNOWORKS PRIVATE LIMITED

/

 └— *BOARD OF DIRECTORS (9 Members)*

 / └— *Chairman & President*

 / └— *Vice-Chairman & Finance Head*

 / └— *Managing Director (MD)*

 / └— *6 Functional Directors*

 /

 └— *ADVISORY BOARD (3 Members)*

 / └— *Academic Leadership*

 / └— *Enterprise Technology*

 / └— *Research Collaboration*

 /

 └— *BUSINESS DIVISIONS*

 / └— *MindforgeAI (AI/ML Solutions)*

 / └— *CodeSmith Systems (Software & IT)*

 / └— *EduSphere (Education & Training)*

 / └— *Chatake GreenWorks (Agricultural Intelligence)*

 /

 └— *WORKFORCE*

 └— *Full-Time Employees (2)*

 └— *Part-Time Research Associates (2)*

 └— *Research Interns (4)*

Strategic Governance

Decision-Making Structure:

- Strategic Level: Board of Directors (Majority Vote)
- Operational Level: Managing Director & Department Heads
- Technical Level: Assistant Managing Director & Research Teams
- Financial Level: Vice-Chairman & Finance Committee
- Advisory Level: Independent Oversight & Mentorship

Division 1: MindforgeAI

Artificial Intelligence & Machine Learning Solutions

Vision:

Transform regional education into global AI excellence through collaborative, human-centered artificial intelligence development.

Head:

Akash S. Chatake (Managing Director)

Core Areas

- Advanced AI research and development
- Deep learning and neural networks
- Robotics and automation
- Computer vision applications
- Data science education and training
- Applied machine learning systems
- MLOps and AI deployment
- Cloud intelligence platforms
- Natural language processing

Key Projects

Apollo Project

A comprehensive AI-driven agricultural intelligence platform combining machine learning, IoT integration, and environmental data analysis to optimize agricultural practices and promote sustainable farming methods.

Architectural Language Development Project

An innovative AI initiative focused on developing semantic understanding systems for architectural design through advanced language processing and computer vision techniques.

Entropy in Neural Networks Study

A cutting-edge research project investigating information flow and entropy dynamics within deep neural networks, contributing to more efficient and interpretable AI systems.

Team

- **Saurabh S. Jadhav** - Data Analyst (Data Analytics, Statistical Modeling)
- **Arthika Birajdar** - Research & Innovation Associate (Machine Learning, Project Apollo)
- **Vijayalaxmi Sundalam** - Research & Innovation Associate (AI Applications, Architectural Intelligence)

Division 2: CodeSmith Systems

Software Development & IT Infrastructure

Vision:

Build the digital backbone for AI-driven education and industry through innovative software solutions and robust IT infrastructure.

Head:

Pravin Vijay Fate (Director – Operations & IT Systems)

Focus Areas

- Enterprise software development
- ERP and CRM system integration
- Cloud computing & infrastructure
- Cybersecurity & data protection
- Digital transformation consulting
- Web and mobile application solutions
- Learning Management Systems (LMS)
- Database management & optimization
- System integration and automation

Key Projects

CodeSmith One ERP Suite

A comprehensive enterprise resource planning solution designed specifically for educational institutions and small-to-medium enterprises.

LMS Integration for EduSphere

An advanced learning management system that incorporates artificial intelligence to personalize learning experiences.

AI-powered Education Dashboard

A sophisticated analytics platform that aggregates data from multiple educational sources.

Technology Stack

- Frontend: React, Angular, Vue.js
- Databases: MySQL, PostgreSQL, MongoDB
- DevOps: Docker, Kubernetes, Jenkins
- Backend: Node.js, Python, Java
- Cloud Platforms: AWS, Azure, Google Cloud
- Mobile: React Native, Flutter

Team

- Dhartee P. Fate - Operations Executive (Business Operations, Client Relations)

Division 3: EduSphere

Educational Technology & Academic Development

Vision:

Merge AI education with real-world problem-solving and prepare the next generation of innovators through comprehensive educational programs and academic excellence.

Head:

Priyanka A. Chatake (Director – Academic & Outreach)

Core Programs

12-week AIML Internship Program

A comprehensive internship program covering foundations of machine learning, TensorFlow, Keras, and research publication methodologies.

Faculty Development Programs (FDPs)

Specialized workshops for educators focusing on AI tools integration, research methodologies, and modern pedagogical approaches.

Short-Term Data Science Courses

Intensive, hands-on courses in machine learning, data analysis, statistical modeling, and data visualization.

Basic Mathematics & Competitive Exam Preparation

Foundational mathematics programs and preparation courses for JEE, MHT-CET, and other competitive examinations.

Educational Philosophy

Emphasizes experiential learning, where theoretical concepts are immediately applied to practical problems for real-world relevance. We maintain collaborative relationships with educational institutions, industry partners, and research organizations.

Division 4: Chatake GreenWorks

Agriculture & Environmental Intelligence

Vision:

"Engineering Intelligence for a Sustainable Planet" through AI-driven solutions for agriculture, environmental monitoring, and rural sustainability.

Head:

Dr. Vikram S. Chatake (Assistant Managing Director – Technical & Research)

Strategic Partnership

Primary Partner:

Patil Agro Industry, Rahatewadi, Solapur

Owner:

Shri Ashok Ramesh Patil

This collaboration provides direct access to agricultural operations, enabling real-world testing and implementation of our AI-driven agricultural solutions.

Key Projects

AgriVerse Platform

An integrated AI and IoT platform that combines crop monitoring, climate data analysis, and soil health assessment.

Smart Irrigation Intelligence System

An AI-powered irrigation management system that optimizes water usage through real-time monitoring.

Sustain+ Environmental Framework

A comprehensive environmental monitoring and AI analytics framework that tracks ecosystem health.

Technology Integration

- IoT sensors for real-time environmental monitoring
- Satellite imagery and remote sensing integration
- Cloud-based data processing and storage
- Machine learning algorithms for predictive analysis
- Mobile applications for farmer interface
- AI-driven recommendation systems

Research & Innovation Associates + Full-time & Part-time Employees

Permanent Employees

Dhartee P. Fate

Position: Operations Executive | CodeSmith Systems

Qualifications: B. Tech (E&TC)

Responsibilities: Operational management, system administration, and employee coordination across technical divisions

Saurabh S. Jadhav

Position: Data Analyst | MindforgeAI

Qualifications: Specialized in data science and analytics

Responsibilities: Data analysis, model validation, and research support for AI projects

Research & Innovation Associates (R&I Program)

The Research & Innovation Associates program represents our commitment to nurturing emerging talent while advancing our research objectives.

Arthika Birajdar

Specialization: ML Implementation

Background: Atlance International Placement

Focus: Machine learning algorithm implementation and optimization

Vijayalaxmi Sundalam

Specialization: AI Applications

Background: Computer Engineering.

Focus: Practical AI applications and system integration

Research Interns & Project Contributors

Vaishnavi Dhuttarge

Role: Project Lead, Apollo Agricultural Intelligence

Responsibilities: Leading agricultural AI research and coordinating interdisciplinary collaboration

Anuja Gurav

Role: Research Documentation

Responsibilities: Technical writing, research documentation, and academic publication support

Siddheshwari Degaonkar

Role: Junior ML Developer

Responsibilities: Model training, algorithm development, and system optimization

Durvankshi Tekale

Role: Neural Network Implementation

Responsibilities: Deep learning architectures and neural network optimization

Program Structure and Mentorship

The R&I program operates under MindforgeAI division supervision, with direct oversight by **Managing Director Akash Chatake** and academic mentorship provided by **Dr. Deepti Jadhav**.

MindforgeAI Innovation Research Fellowship (MIRF)

The **MIRF** program represents our flagship research initiative, providing structured opportunities for advanced research in artificial intelligence, machine learning, and related technologies.

Key Projects

Apollo Project

Domain: Agricultural Intelligence | **Lead:** Vaishnavi Dhuttarge

Scope: Comprehensive AI-driven agricultural intelligence platform combining machine learning, IoT integration, and environmental data analysis. Achievements: Deployed in 3 regions, achieving 15% yield improvement, reduced water consumption by 20% with intelligent irrigation.

Entropy Studies in Neural Networks

Domain: Advanced AI Research | **Lead:** Research Fellowship Program

Scope: Advanced research investigating information theory applications in deep learning, focusing on understanding how information flows through neural network architectures.

AgriVerse Platform

Domain: Agricultural Technology | **Lead:** Chatake GreenWorks

Scope: Integrated AI and IoT platform combining crop monitoring, climate data analysis, soil health assessment, and predictive analytics.

Sustain+ Environmental Framework

Domain: Environmental Intelligence | **Lead:** Chatake GreenWorks

Scope: Comprehensive environmental monitoring and AI analytics framework tracking ecosystem health, pollution levels, and biodiversity indicators.

Architectural Language Development

Domain: AI Research | **Lead:** MindforgeAI

Scope: Innovative AI initiative focused on developing semantic understanding systems for architectural design through advanced language processing and computer vision techniques.

MIRF (MindforgeAI Innovation Research Fellowship)

Domain: Research Program | **Lead:** Flagship research initiative

Scope: Providing structured opportunities for advanced research in AI, ML, and related technologies, contributing to both academic publications and industry applications.

Legal & Compliance

Legal Framework

Legal Advisor:

Adv. Mahesh Jagtap, Solapur District Session Court

Corporate Governance Structure

Decision-Making Hierarchy:

- Strategic Level: Board vote for major strategic decisions, policy changes, and significant resource allocations
- Operational Level: Managing Director in coordination with division heads for day-to-day decisions
- Technical Level: Assistant Managing Director overseeing technical decisions, research directions, and technology investments
- Financial Level: Vice-Chairperson & Finance Committee managing financial decisions and fiscal policy
- Advisory Level: Advisory Board providing independent oversight and mentorship

Compliance Framework

We maintain strict adherence to:

- Companies Act, 2013 requirements
- Information technology regulations
- Data protection and privacy laws
- Employment and labor regulations
- Environmental and safety standards
- Academic and research ethics guidelines

Ethical Standards

We emphasize ethical business practices, social responsibility, transparency, accountability, and stakeholder engagement in all business activities. Our governance framework includes comprehensive risk management procedures covering operational, financial, technical, and strategic risks.

Strategic Vision Timeline (2025-2028)

Phase 1 (2025-26): Foundation and Launch

- Complete division setup and staffing
- Implement operational procedures and quality standards
- Establish key partnerships and collaborations
- Initiate 12-week AIML internship program
- Develop comprehensive curriculum and training materials
- Establish mentorship and evaluation frameworks
- Deploy initial agricultural intelligence systems
- Conduct field testing with partner agricultural operations
- Collect baseline data and refine algorithms

Phase 2 (2026-27): Expansion and Integration

- Establish advanced research laboratories
- Increase research staff and fellowship programs
- Develop industry partnerships for applied research
- Complete development of comprehensive agricultural platform
- Integrate IoT sensors and data collection systems
- Launch commercial pilot programs
- Establish dedicated environmental research facilities
- Develop climate monitoring and analysis capabilities
- Launch sustainability consulting services

Phase 3 (2027-28): Research Center Establishment

- Establish dedicated research campus in Solapur
- Create state-of-the-art research facilities
- Develop graduate research programs
- Launch robotics and automation research
- Develop advanced AI applications
- Establish intellectual property portfolio

Phase 4 (2028+): Global Expansion

- Establish partnerships with international research institutions
- Develop global market presence
- Launch international research exchange programs
- Scale successful pilot programs to commercial deployment
- Establish revenue-generating product lines
- Develop sustainable business models

Success Metrics and Milestones

Each phase includes specific, measurable objectives with defined success criteria, ensuring accountability and progress tracking throughout our strategic development timeline.

Future Initiatives

AI for Education & Industry

Educational AI Applications:

- Personalized learning systems
- Automated assessment and feedback tools
- Intelligent tutoring systems
- Educational content generation and optimization
- Student performance prediction and intervention systems

Industrial AI Solutions:

- Process optimization and automation
- Predictive maintenance systems
- Quality control and inspection systems
- Supply chain optimization
- Energy efficiency and resource management

Agri-Data & IoT Platforms

Building on our GreenWorks division, we plan to develop comprehensive agricultural data platforms integrating IoT sensors, satellite imagery, and AI analytics.

Platform Components:

- Real-time environmental monitoring
- Crop health assessment and disease prediction
- Market price analysis and optimization
- Resource allocation and optimization
- Climate adaptation and resilience planning

Cloud-AI Integration

Cloud Services Development:

- AI-as-a-Service platforms
- Educational cloud computing resources
- Data analytics and visualization tools
- Collaborative research platforms
- Mobile and web application hosting

National FDPs & AI Literacy Programs

Expansion of Faculty Development Programs to national scale, addressing the critical need for AI literacy among educators and professionals across India.

Program Expansion:

- Regional training centers
- Online learning platforms
- Certification programs
- Industry partnerships
- Government collaboration initiatives

Robotics, DeepTech, and Climate Intelligence

Advanced Technology Areas:

- Agricultural robotics and automation
- Environmental monitoring robots
- Climate modeling and prediction systems
- Renewable energy optimization
- Smart city technologies

Acknowledgment Page

Chatake Innoworks Pvt. Ltd. extends its heartfelt gratitude to every individual who has been part of this journey – the mentors, directors, advisors, associates, and young minds who continue to define the soul of our company.

We express our special thanks to:

Shivadas B. Chatake, Chairman & President,
for his lifelong commitment to education and guidance.

Vijaya S. Chatake, Vice-Chairman & Finance Head,
for her wisdom and resilience as the matriarch and financial custodian.

Pratap C. Patil (Chatake), Director – Industry & Infrastructure,
for his engineering expertise and mentorship in industrial design.

Priyanka A. Chatake, Director – Academic & Outreach,
for leading the transformation in educational innovation.

Dr. Rutuja V. Chatake, Director – Chemical AI Applications,
for her pioneering role in AI-driven chemical intelligence.

Dhartee P. Fate, Employee Representative,
for representing our growing team with integrity and purpose.

Dr. Vikram S. Chatake, Assistant Managing Director (Technical & Research),
for his visionary approach to technology and sustainability.

Akash S. Chatake, Managing Director,
for his leadership, devotion, and innovation in shaping MindforgeAI and the company's mission.

Our deepest appreciation to the Advisory Board – Prof. Gajanan R. Dharane, Hon. Mr. Shailendra Jadhav, and Dr. Deepti Shailendra Jadhav – whose mentorship bridges academia and industry with insight and excellence.

We also thank our dedicated employees, research associates, and interns – Dhartee Fate, Saurabh Jadhav, Arthika Birajdar, Vijayalaxmi Sundalam, Vaishnavi Dhuttarge, Anuja Gurav, Siddheshwari Degaonkar, and Durvankshi Tekale – for their commitment, brilliance, and contribution to MindforgeAI, EduSphere, CodeSmith Systems, and Chatake GreenWorks.

Finally, we acknowledge the support of our extended partners, collaborators, and family – especially Patil Agro Industry, Rahatewadi, under the guidance of Shri Ashok Ramesh Patil, whose partnership strengthens our agricultural and environmental vision.

Each name, each project, and each idea in this document reflects a shared belief – that knowledge and compassion together can engineer a better world.

– With gratitude and respect,
The Board of Directors, Chatake Innoworks Pvt. Ltd.
Solapur-Pune, Maharashtra
October 2025

Corporate Declaration

This document represents the unified vision and strategic direction of Chatake Innoworks Pvt. Ltd., its divisions, research ecosystem, and advisory council.

All contents herein are property of Chatake Innoworks Pvt. Ltd. and its publishing division MindforgeAI.

Duplication, redistribution, or reproduction in any form is prohibited without written consent of the Board.

Colophon

Document Title: Chatake Innoworks Pvt. Ltd. – Corporate Profile & Vision 2025–2028

Compiled & Edited By: MindforgeAI Division

Supervised By: • Akash S. Chatake (Managing Director)

• Dr. Vikram S. Chatake (Assistant Managing Director)

Research & Editorial Contributions: EduSphere Academic Team

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"Every innovation begins as an idea, and every idea begins with faith."

Authorization & Signature

This corporate profile document has been reviewed, approved, and authorized by the Board of Directors of Chatake Innoworks Pvt. Ltd.

Document Authorization:

Managing Director

Akash S. Chatake

Signature: _____

Date: 17 October 2025

Board Resolution Reference: BR-2025-10-17

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Approved by Board on: 17 Oct. 2025

Next Review Date: 17 Oct. 2026

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