

Senior Product Engineer / AI-Native Tech Lead

Experience: 4-8 Years

Location: Kolkata / Hybrid

Employment Type: Full-Time

Annual CTC: Rs 9,00,000 - Rs 12,00,000

About the Role

We are looking for a strong, hands-on Senior Product Engineer / AI-Native Tech Lead who can take business ideas and convert them into reliable, production-ready software products.

This is not a role where you will simply receive tickets and write code.

You will work closely with the founder/business team to understand problems, define the product, decide the technical architecture, build the application, guide a junior engineer, deploy it, and ensure that it continues to work reliably in production.

We intend to build multiple internal business applications as well as experimental SaaS, web and mobile products using a small, highly capable, AI-native engineering team.

You should be comfortable using modern AI coding tools such as Claude Code, Codex, ChatGPT, Cursor or similar tools to significantly increase development speed while maintaining good engineering standards.

What You Will Do

Product & Architecture

- Understand business requirements directly from founders and business teams.
- Convert loosely defined ideas into clear technical requirements and product specifications.
- Decide the appropriate technology stack and system architecture.
- Design databases, APIs, authentication systems and application workflows.
- Identify edge cases, scalability concerns and technical risks before development.
- Decide what should be custom-built and what can be implemented using existing platforms, APIs or automation tools.

Full-Stack Development

Build complete web and mobile applications including:

- Frontend applications
- Backend APIs
- Databases
- Authentication and authorization
- Role-based access control
- File/document handling
- Notifications
- Payments where required
- Third-party integrations
- AI-powered functionality

You should be comfortable owning a product from idea to deployment.

AI-Native Development

We expect AI tools to be a fundamental part of our development workflow.

You should be comfortable using tools such as:

- Claude / Claude Code
- OpenAI / Codex / ChatGPT
- Cursor or similar AI IDEs
- Gemini
- GitHub Copilot

- OpenRouter

You should know how to use AI to:

- Generate and refactor code
- Debug applications
- Understand unfamiliar codebases
- Write tests
- Create documentation
- Explore alternative architectures
- Accelerate repetitive development work

However, you must also be capable of reviewing AI-generated code and identifying poor architecture, security problems, inefficient implementations and technical debt.

AI Application Development

Experience or strong interest in building applications using:

- OpenAI APIs
- Anthropic APIs
- Gemini APIs
- Open-source AI models
- OpenRouter
- Structured outputs
- Function/tool calling
- AI agents
- RAG / vector databases
- Embeddings
- Prompt engineering
- AI workflow orchestration

Experience with frameworks such as LangChain, LangGraph, LlamaIndex or similar frameworks is useful but not mandatory.

Preferred Technology Stack

You do not need to know every technology below, but you should be strong in a modern full-stack development environment.

Frontend

- React
- Next.js
- TypeScript
- HTML / CSS
- Tailwind CSS or similar frameworks

Backend

Strong experience with at least one of:

- Node.js / TypeScript
- Python / FastAPI / Django

Databases

- PostgreSQL
- SQL
- Redis
- Supabase / Firebase where appropriate

Mobile

Experience with one of:

- React Native
- Expo
- Flutter

Infrastructure

Working knowledge of:

- Git / GitHub
- Docker
- REST APIs
- Webhooks
- CI/CD
- Cloud hosting
- Logging and monitoring
- Database backups
- Environment management

Experience with AWS, Google Cloud, Azure, Vercel, Railway, Render, Supabase or similar platforms is useful.

Engineering Responsibilities

You will also be responsible for ensuring that products are properly engineered rather than simply prototyped. This includes:

- Code quality
- Architecture
- Documentation
- Testing
- Security
- Error handling
- Logging
- Monitoring
- Database migrations
- Backups
- Production deployment
- Performance
- Maintainability

Team Leadership

You will work with and guide a junior AI & Automation Engineer. You will be expected to:

- Break products into development tasks
- Delegate appropriate work
- Review code
- Mentor the junior engineer
- Establish development standards
- Maintain GitHub repositories
- Ensure code is properly documented
- Ensure features are tested before release

This is a hands-on engineering role. You will be expected to code extensively yourself.

What We Are Looking For

We are looking for someone who:

- Has approximately 4-8 years of software development experience.
- Has independently built and deployed complete applications.
- Understands both frontend and backend development.
- Has strong database fundamentals.
- Understands APIs and system integrations.
- Can make sensible architecture decisions.
- Can debug complex problems independently.
- Understands software security basics.
- Writes clean, maintainable code.
- Is comfortable working in a small team with considerable ownership.
- Can work directly with business users rather than depending on detailed technical specifications.

- Is curious about new AI technologies and experiments with them regularly.
- Uses AI to become a significantly more productive engineer.

What Matters More Than the Exact Tech Stack

We are less interested in whether you know a particular framework and more interested in whether you can:

Understand a problem -> design a solution -> build it -> deploy it -> maintain it.

Technology changes quickly, particularly in the AI ecosystem. The ability to learn new technologies rapidly is therefore extremely important.

Examples of Products You May Build

- Internal MIS systems
- Procurement and RFQ platforms
- Inventory and factory management systems
- Workflow automation systems
- AI assistants
- Document-processing systems
- WhatsApp-based business applications
- CRM and business process tools
- AI-enabled SaaS products
- Mobile applications
- Dashboards and analytics platforms
- Experimental technology products

Ideal Candidate

You may be a good fit if you enjoy working in an environment where someone says:

"Here is the business problem. Figure out the best way to solve it using technology."

and you are comfortable taking ownership from there.

We are looking for a builder rather than someone who only works on narrowly defined development tickets.

Compensation

Annual CTC: Rs 9,00,000 - Rs 12,00,000

Compensation within the range will depend on experience, technical capability, product thinking and performance during the selection process.