## KINESIS LABS WEEKEND AI BOOTCAMP

#### Indiranagar, Bangalore

Live In Person Sessions | Saturdays | 10AM to 4PM

Phone: +91 936-410-6620 Email: hello@kinesislabs.in



### **Bootcamp** overview

Kinesis Labs is hosting an 8-week, in-person AI Bootcamp designed for learners who want to build a strong foundation in AI and apply it meaningfully in their work, research, or creative projects beyond simple prompting with ChatGPT.

The program combines hands-on learning with guided mentorship, covering core concepts behind large language models, automation pipelines and optimal use of several AI tools and frameworks.

The bootcamp is held at our space in Indiranagar, Bangalore, and includes weekend sessions, peer reviews, and access to a growing community of learners and practitioners.

Applications are open now. Seats are limited to maintain a focused and collaborative environment.

### Bootcamp USP

#### O PROJECT FIRST APPROACH

Participants will work on 8+ real-world projects to learn practical skills, collaborate in teams, and explore how AI can be used responsibly and effectively.

#### IN-PERSON SESSIONS

In a world of MOOCs, our in-person sessions help participants build and sustain momentum.

#### MEANINGFUL NETWORKS

Strong peer networks are built across the world when people interact towards a common goal, opening up career and other opportunities



## Who can benefit from this bootcamp

#### ENTERPRISES LOOKING TO UPSKILL THEIR WORKFORCE

Ideal for enterprises who want to upskill their teams and provide exposure to them so that they gain practical, hands-on experience by building real AI-powered solutions and deploying to optimize internal work processes.

#### BUSINESS PROFESSIONALS ADDING TECH TO THEIR TOOLKIT

For non-technical professionals and business students who understand that in today's AI-first world, technical skills are a major advantage. This course offers a practical, approachable entry point—no deep programming background required.

#### EXPERIENCED PROFESSIONALS READY TO UPSKILL

Targeted at professionals with few years of experience, especially those still using traditional workflows in software development. Learn how to modernize your skillset by integrating automation, data workflows, and AI into your work.

#### EARLY STAGE UNDERGRADUATE STUDENTS

Ideal for undergraduate students just beginning their tech journey. Gain practical, hands-on experience by building real AI-powered solutions—perfect to complement your academic foundation.



### **Eligibility** Criteria

No prior AI experience is required, but basic programming knowledge is expected. Whether you're a student, professional, founder, or researcher, the bootcamp is designed to help you move from confusion to clarity, and from curiosity to capability.

## **Bootcamp Facilitators**

#### 🗿 ROSHAN MISHRA - AI RESEARCHER

With over 12 years of experience in technology operations, education leadership, and project management, Roshan brings a wealth of expertise to our team. He combines hands-on technical leadership in Python and GenAI with a strong background in education, having previously led curriculum development at prominent ed-tech firms. Recently, he spearheaded AI-powered SAAS solutions for enterprise clients.

#### 🔿 RAJANSHU UJJWAL - MENTOR & ADVISOR

Rajanshu is a compassionate mentor, advisor and educator dedicated to making complex web technologies accessible to learners from all backgrounds. With years of industry experience, he bridges the gap between academic theory and real-world development by focusing on strong fundamentals, hands-on problem-solving, and personalized mentorship that fits into the lives of working professionals and career changers.

He has successfully guided individuals from diverse fields such as QA, civil engineering and architecture into thriving development careers. His students consistently gain more than just technical skills - they develop confidence, adaptability, and a strong problem-solving mindset. Outside of teaching and technology, Rajanshu enjoys riding his unicycle, a hobby that reflects his belief in presence, and persistence with balance and bliss in the life journey.





### **Course Advisors**

#### ERIC GIESEKE

Eric is a seasoned software architect and entrepreneur with over 30 years of experience building large-scale, distributed systems. As Co-Founder of DIYVA and Founder of Pago, he works at the intersection of AI, blockchain, and multilingual virtual assistants. He has led teams across fintech, identity, and ecommerce platforms, and served as a Principal Engineer at Algorand and ACI Worldwide. Eric teaches software design at Harvard Extension School, blending academic rigor with deep industry insights. His work has supported fraud detection, mobile commerce, and semantic search systems at global scale.

#### ANINDITA MAHAPATRA

Anindita is a Principal Solutions Architect at Databricks, with two decades of experience in data engineering, cloud infrastructure, and software architecture. With prior roles at Teradata, Nokia, and Soapstone Networks, she has led complex projects in big data systems and telecom software. A graduate of Harvard University and BITS Pilani, she combines a strong academic foundation with enterprise-grade problemsolving. Anindita holds multiple patents in content management and feature programming, and brings a pragmatic, hands-on approach to building scalable AI and data platforms.

## CURRICULUM

A DETAILED GUIDE TO PROJECTS, IMPLEMENTATION AND TOPICS COVERED

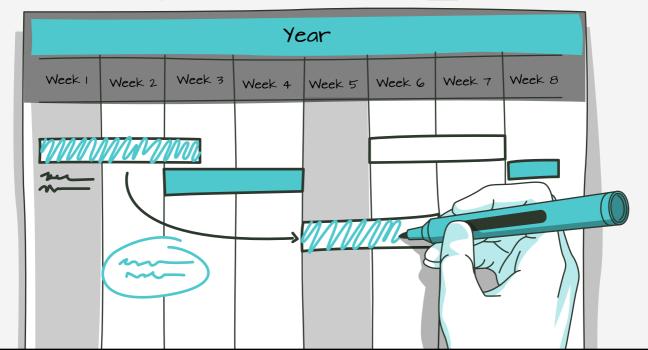


## WEEKEND 1-8

PROJECTS | IMPLEMENTATION | TOPICS COVERED

PYTHON PROGRAMMING WITH AI ASSISTANCE
PYTHON RECAP + N8N INTEGRATION
ADVANCED PROMPTING & APIs
FUNCTION/TOOL CALLING & RESEARCH ASSISTANT
WEBAPP BUILDING WITH MODERN AI TOOLS
DATABASEs
LLM ECOSYSTEM & LOCAL DEVELOPMENT
STOCK MARKET ANALYSIS PROJECT





#### PYTHON PROGRAMMING WITH AI ASSISTANCE

#### PROJECT YOU'LL BUILD:

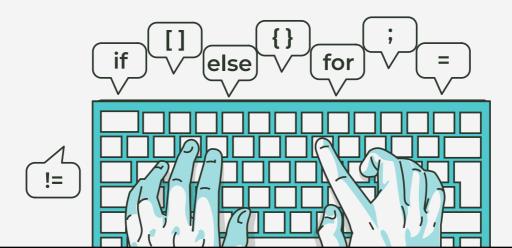
#### AI GENERATED PROFESSIONAL BUSINESS PLATFORM

- Use AI to generate a complete professional website with business tools
- Features: Portfolio showcase, contact system, data processing capabilities, client dashboards
- Business Value: Immediately deployable professional presence + practical business tools
- AI Focus: Demonstrate how professionals can leverage AI to create sophisticated solutions quickly

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- Generating business applications with AI prompts
- Testing and customizing AI-generated solutions
- Deploying applications without deep technical knowledge
- Building practical tools for immediate business use
- Creating professional web presence quickly
- Basic troubleshooting of AI-generated code

- Using LLMs (ChatGPT, Claude) to generate complete applications
- Al prompt engineering for specific business needs
- Understanding vs. using AI-generated code
- Quick deployment strategies for professionals
- Basic project structure and file organization
- Version control basics for business use



**PYTHON RECAP + N8N INTEGRATION** 

#### PROJECT YOU'LL BUILD:

#### INTELLIGENT BUSINESS PROCESS AUTOMATION PLATFORM

- Build a complete business automation system using primarily n8n with strategic Algenerated code components
- Features: Multi-app integrations, automated content monitoring, AI-powered analysis, automated reporting, process triggers
- Business Value: Immediately deployable for automating repetitive business tasks
  across multiple platforms
- Low-Code Focus: 80% visual n8n workflows, 20% AI-generated code snippets where necessary

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- Build complete workflows in n8n visual interface
- Using AI to generate code snippets for custom nodes when needed
- Connecting multiple business applications automatically
- Processing data between systems without manual intervention
- Setting up automated reporting and notifications
- Troubleshooting workflows with AI assistance

- n8n workflow automation for business processes
- When to use low-code vs. when to request AI-generated code
- Connecting business apps and services through n8n
- Al prompt engineering for n8n custom code nodes
- Data processing and transformation in workflows
- Business automation thinking and process design

ADVANCED PROMPTING & APIs

#### PROJECT YOU'LL BUILD:

#### ENTERPRISE AI CONTENT ANALYSIS PLATFORM

- Build a complete AI-powered content analysis system with advanced prompting techniques
- Features: Document processing, multi-format analysis, advanced prompt engineering, cost optimization, batch processing, professional API, web interface
- Business Value: Immediately deployable for content teams, researchers, and business analysis
- Demonstrates: Advanced AI integration, prompt engineering mastery, scalable architecture, production deployment

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- Using OpenAI API programmatically in Python
- Designing prompts for code generation and debugging
- Building content analysis systems with AI
- Implementing structured output processing
- Creating feedback loops for AI improvement
- Managing API costs and rate limits

- Advanced prompt engineering for code generation
- OpenAI API integration and usage patterns
- Structured data processing with LLMs
- Cost optimization for API usage
- Error handling in AI-powered applications
- Building robust content analysis systems



#### FUNCTION/TOOL CALLING & RESEARCH ASSISTANT

#### PROJECT YOU'LL BUILD:

#### ADVANCED AI RESEARCH & ANALYSIS ASSISTANT

- Build a sophisticated research platform with function calling, meta-prompting, and Chain-of-Thought reasoning
- Features: Multi-tool research orchestration, advanced prompting strategies, intelligent tool selection, comprehensive reporting, meta-prompting for complex analysis
- Business Value: Immediately useful for research teams, consultants, and strategic analysis work
- Demonstrates: Advanced AI techniques, meta-prompting, CoT reasoning, complex function orchestration, production-ready research automation

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- Implementing function calling in Python applications
- Building tools that agents can use dynamically
- Creating research workflows with multiple data sources
- Designing robust API orchestration systems
- Testing and debugging function calling systems
- Managing context across tool interactions

- Function calling with OpenAI and other LLMs
- Meta-prompting techniques for complex reasoning
- Chain-of-Thought (CoT) prompting strategies
- Tool orchestration and intelligent selection
- Building research automation systems
- API integration for external data sources
- Context management in multi-step processes
- Advanced reasoning patterns and prompt engineering

## WEEKEND S

#### WEBAPP BUILDING WITH MODERN AI TOOLS

#### PROJECT YOU'LL BUILD:

#### PROFESSIONAL BUSINESS MANAGEMENT PLATFORM

- Build a complete business management system using modern tools (Loveable/ Supabase)
- Features: User authentication, project management, team collaboration, data analytics, real-time updates, mobile-responsive design, Python API backend
- Business Value: Immediately deployable for small teams and freelancers to manage their business operations
- Demonstrates: Modern full-stack development, database design, real-time features, professional deployment, scalable architecture

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- Building applications with Loveable or similar tools
- Integrating Supabase for database functionality
- Creating Python APIs that connect to modern frontends
- Implementing user authentication systems
- Deploying full-stack applications
- Managing data flow between frontend and backend

- Modern website building with AI-powered tools
- Database integration with Supabase
- Full-stack application architecture
- Connecting Python backends with frontend builders
- User authentication and authorization
- Deployment strategies for modern applications

#### PROJECT YOU'LL BUILD:

#### ENTERPRISE DATA MANAGEMENT & ANALYTICS PLATFORM

- Build a complete business data platform with CRM, inventory, and analytics capabilities
- Features: Customer relationship management, inventory tracking, sales analytics, financial reporting, data relationships, advanced SQL queries, performance dashboards
- Business Value: Immediately deployable for SMEs to manage all their data needs in one platform
- Demonstrates: Advanced database design, complex SQL operations, data analytics, reporting systems, scalable data architecture

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- Designing database schemas for applications
- Writing complex SQL queries for data analysis
- Integrating databases with Python applications
- Building data persistence layers
- Creating database-driven web applications
- Implementing data migration and backup strategies

- Database design principles and normalization
- SQL fundamentals: SELECT, INSERT, UPDATE, DELETE
- Working with PostgreSQL and SQLite
- Python database integration with SQLAlchemy
- Data modeling and relationships
- Database performance and optimization

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LLM ECOSYSTEM & LOCAL DEVELOPMENT

#### PROJECT YOU'LL BUILD:

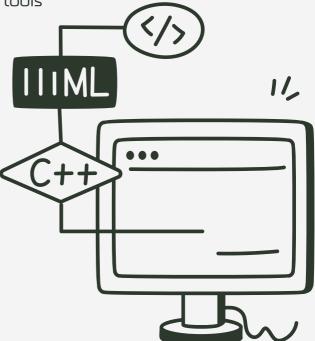
#### MULTI-MODEL AI DEVELOPMENT PLATFORM

- Build a complete AI development environment with local and cloud LLM integration
- Features: Model comparison dashboard, cost optimization, local LLM deployment, coding assistance, performance benchmarking, intelligent model routing, development accelerator tools
- Business Value: Immediately useful for development teams to optimize AI usage and reduce costs while maximizing productivity
- Demonstrates: LLM ecosystem mastery, local deployment, cost optimization, development tooling, production AI systems

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- Setting up local LLM environments
- Comparing different LLM capabilities and costs
- Building applications that use multiple models
- Implementing coding agents for development tasks
- Creating model selection logic for different use cases
- Optimizing performance for local and cloud models

- LLM landscape and model selection criteria
- Local LLM deployment with Ollama and similar tools
- Coding agents and AI-assisted development
- Model performance vs cost trade-offs
- Privacy and security considerations for LLMs
- Building applications with multiple LLM types



#### STOCK MARKET ANALYSIS PROJECT

#### PROJECT YOU'LL BUILD:

#### PROFESSIONAL FINANCIAL INTELLIGENCE & TRADING PLATFORM

- Build a complete financial analysis and portfolio management system integrating all course technologies
- Features: Real-time market data, technical analysis, AI-powered insights, portfolio optimization, risk management, automated trading signals, professional reporting, mobile app integration
- Business Value: Immediately deployable for personal investing, financial advisors, and small investment firms
- Demonstrates: Integration of all course skills, professional-grade financial software, scalable architecture, real-world trading applications

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- Building complete financial analysis applications
- Implementing real-time data feeds and processing
- Creating sophisticated visualization dashboards
- Integrating AI for market sentiment analysis
- Deploying production-ready applications
- Combining databases, APIs, AI, and web technologies

- Financial data collection and processing with Python
- Technical analysis implementation and visualization
- AI-powered sentiment analysis and news processing
- Real-time data processing and alert systems
- Professional web application deployment
- Integration of all course technologies



### **Frequently Asked Questions**



If you have more queries, reachout to us at **hello@kinesislabs.in** 



#### PROGRAM STRUCTURE AND FORMAT

#### O What is the time commitment for this bootcamp?

We expect participants to attend all weekend sessions. In addition to this, a participant should be able to spend 8-12 hours during the week to complete projects and review topics covered during sessions.

#### Why in-person sessions instead of online?

In-person sessions help build and sustain momentum that's often missing in online courses. You can pick up skills in weeks that would otherwise take months or years. Plus, you get direct mentorship, immediate problem-solving, and strong peer networking opportunities.

#### What if I miss a weekend session?

Given the project-based nature and limited seats, consistent attendance is crucial. Each weekend builds upon the previous one. We recommend ensuring full availability before enrolling. Makeup options may be discussed on a case-by-case basis.

#### O How many students are in each cohort?

We maintain small cohort sizes to ensure focused attention, meaningful peer interactions, and effective mentorship. Exact numbers aren't specified, but seats are intentionally limited.





#### PREREQUISITES & ELIGIBILITY

#### 🔿 I have no Al experience. Can I still join?

Absolutely! No prior AI experience is required. The program is designed to take you from confusion to clarity and curiosity to capability, regardless of your starting point.

#### O What level of programming knowledge is needed?

Basic programming knowledge is expected, but you don't need to be an expert. The program uses AI assistance extensively, so you'll learn to leverage AI tools for coding rather than writing everything from scratch.

#### I'm a business professional with no technical background. Is this suitable?

Yes, this is perfect for non-technical professionals. The program is specifically designed for business professionals who want to add technical skills to their toolkit without deep programming requirements.

#### What age groups can benefit from this program?

The program caters to diverse groups: early-stage undergraduates, mid-career professionals (10-15 years experience), business students, entrepreneurs, and enterprise teams. Age is less important than motivation to learn.





#### **TECHNICAL REQUIREMENTS**

#### • What equipment do I need to bring?

You'll need a laptop capable of running Python applications and web browsers. Specific technical requirements will be shared upon enrollment. Most modern laptops should suffice.

#### Are there any software costs involved?

The program uses a mix of free and paid tools. Some AI APIs (OpenAI, Claude) may require credits, but costs are kept minimal and optimized. Most tools used are either free or have free tiers suitable for learning.

#### O Do I need to install complex software beforehand?

Installation guidance will be provided before the program starts. Most tools are cloudbased or have simple installation processes. Technical setup support is included.

#### PROJECT & LEARNING OUTCOMES

#### Will I build real applications that I can use in my business?

Yes! Every project is designed for immediate business application. By Week 1, you'll deploy your first ai automation. By Week 8, you'll have multiple production-ready AI systems.



## FREQUENTLY ASKED QUESTIONS

#### What happens to the projects after the bootcamp?

All projects you build are yours to keep, modify, and deploy. You'll also have access to templates and resources for future development.

#### Will I get certificates or credentials?

While specific certification details aren't mentioned, you'll have a portfolio of 8+ working AI applications that demonstrate your capabilities to employers or clients.

#### CAREER & BUSINESS IMPACT

#### O How quickly can I see ROI from this investment?

Many participants deploy time-saving automations from Week 1. The skills gained typically help save 10-20 hours per week, providing immediate ROI. Long-term career benefits often far exceed the investment.

#### Is this suitable for entrepreneurs starting AI-based businesses?

Extremely suitable. You'll learn to build AI-powered solutions cost-effectively, understand the technology landscape, and create minimum viable products quickly.

#### Can enterprises send multiple team members?

Yes, the program is ideal for enterprise teams looking to upskill together. Group learning enhances collaboration and ensures consistent AI adoption across teams.



## FREQUENTLY ASKED QUESTIONS

#### Will this help me transition to an AI-focused career?

The practical project portfolio and comprehensive skill development provide a strong foundation for AI career transitions. The networking opportunities also open doors to new opportunities.

#### COMMUNITY & SUPPORT

#### What kind of ongoing support is available after completion?

You'll have acces to a growing community of alumni and practitioners. While specific ongoing support details aren't outlined, the networking component suggests continued peer connections.

#### Can I collaborate with other participants on projects?

Yes, collaboration is encouraged. The program includes peer reviews and team-based learning, fostering both individual skills and collaborative problem-solving.

#### Are there opportunities for advanced learning after this bootcamp?

While not explicitly mentioned, the community aspect and mentor relationships often lead to advanced learning opportunities and continued development paths.



## THANK YOU!

# JOIN THE AI REVOLUTION