

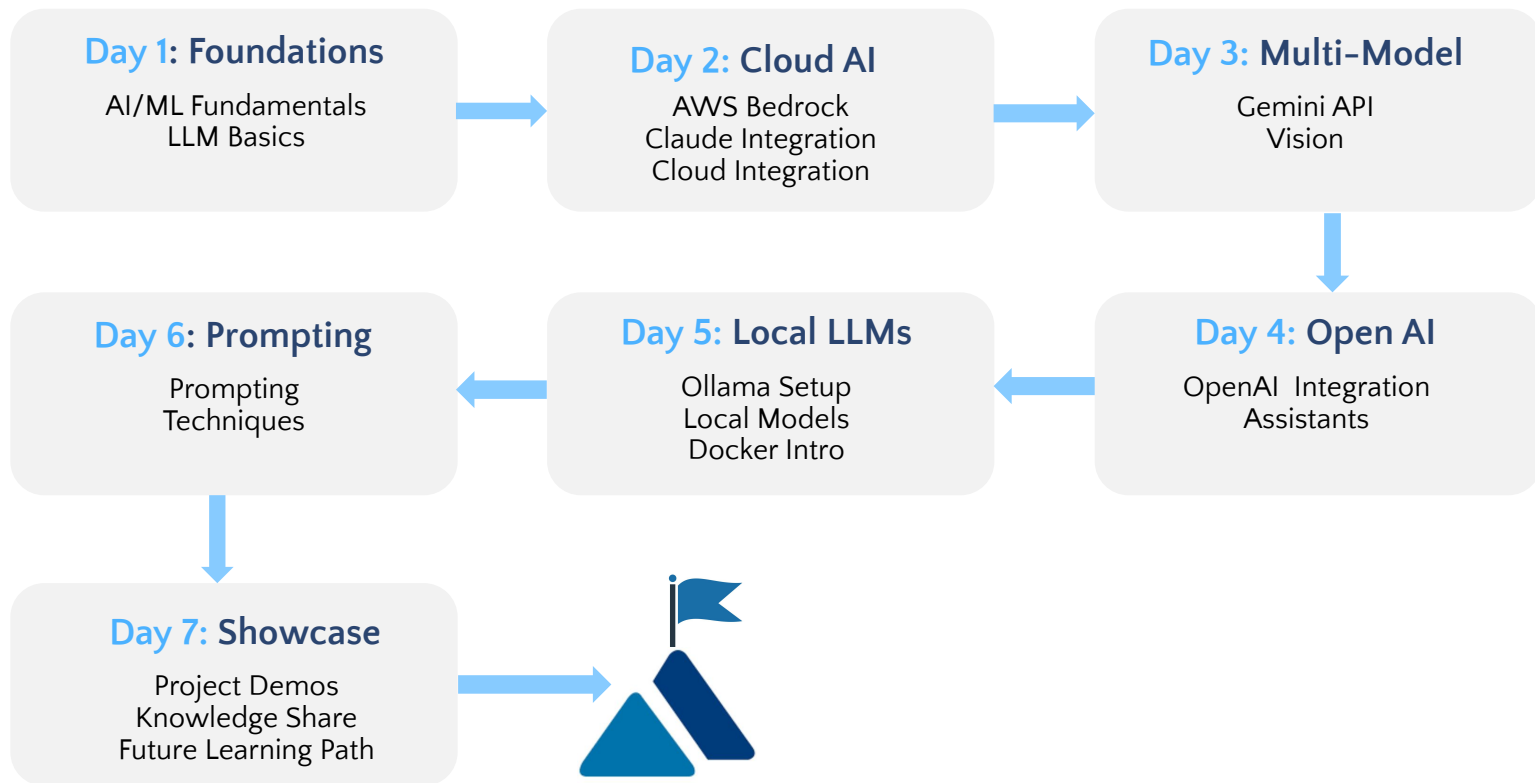
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Speaker: Sam Adekunle
AI Camp Content: AI Camp London

04.01.2025



AI Immersion Workshop:
Day 7 - Recap and further learning

AI Immersion RoadMap - AICamp



What we learned so far - overview

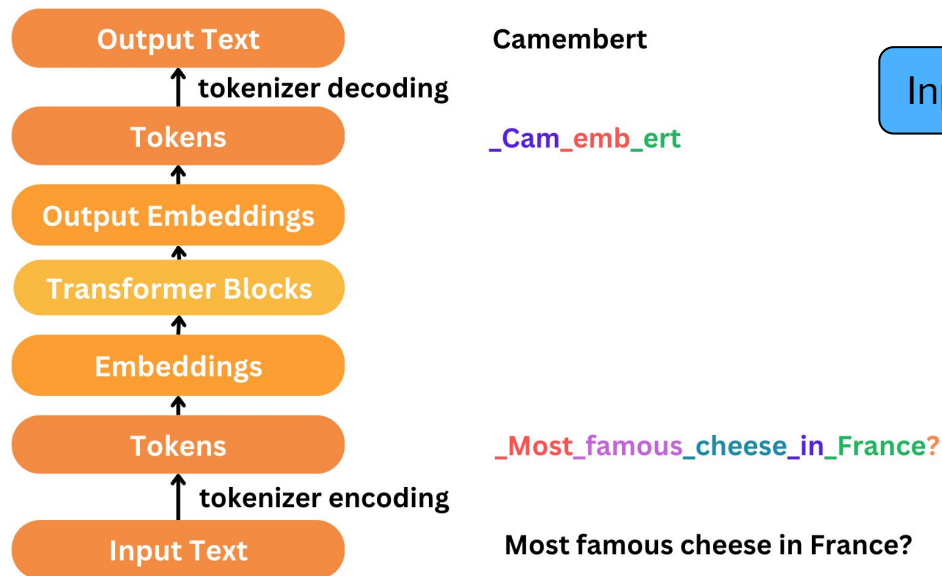
Foundations → Implementation → Mastery use of LLM APIs

Tools Learned

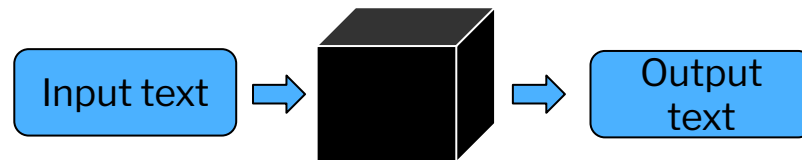
- Python (was requirement)
- Ollama - Meta LLama/Google Gemma
- Bedrock - Claude
- Google Ai Studio - Gemini
- OpenAI Platform and assistants
- Google IDX - Nix OS(Linux)
- Advanced prompting techniques

The basics of LLM-s

- Simple definition
- Evolution from traditional ML
- Input → Process → Output visualization



Black Box System Model



“We don’t need to know what happens inside”

LLM - Major Providers we familiarized with

Cloud LLMs

- OpenAI GPT-4/O1-O3
- Claude
- Google Gemini

Local/Open Source LLMs

- Llama 2
- Mistral
- Ollama

Providers we learned



OpenAI



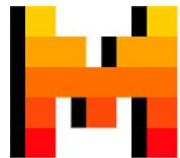
Amazon Bedrock



Meta



Microsoft



MISTRAL

AI_



deepseek



cohere

Concepts we familiarized with

API Integration & Development

- **SDK Implementation**
 - Python SDK usage across platforms (OpenAI, Google AI, Anthropic)
 - Authentication and API key management
 - Request/response handling patterns

Deployment Environments

- **Cloud vs Local**
 - Cloud platforms (AWS Bedrock, Google AI Studio, OpenAI)
 - Local deployment with Ollama
 - Tradeoffs and use cases
 - Basic scaling considerations

Prompt Engineering and LLM Fundamentals

- **Advanced Techniques**
 - Context window management
 - Chain-of-thought prompting
 - Few-shot learning approaches
 - Basic vector representation
 - Rate limiting

Advanced Capabilities

- **Multi-modal Processing**
 - Image analysis with Gemini
 - Code generation and execution
 - Function calling implementations

Further learning directions

Practical Implementation Tracks

1. **No-Code/Low-Code AI Development**
 - Langchain templates
 - AutoGPT and agent frameworks
 - Streamlit and Gradio for rapid prototyping
 - Integration with existing business tools
2. **LLM-Based Tools & Agents**
 - Building autonomous AI agents
 - Task-specific assistant development
 - Knowledge base integration
 - Workflow automation systems

Specialization Options

1. **Advanced AI Development**
 - Computer vision and image processing
 - Deep learning architectures
 - Model fine-tuning and optimization
 - MLOps and production deployment
2. **Infrastructure & Development**
 - DevOps for AI applications
 - Containerization and orchestration
 - Monitoring and observability
 - Cost optimization strategies

Project ideas

Business Applications

- Customer service automation
- Document analysis systems
- Multilingual content management

Technical Projects

- Custom model fine-tuning
- API wrapper development
- Specialized prompt engineering

Integration Projects

- Multi-model orchestration
- Cross-platform integration
- Custom tool development



Business applications

Enterprise Solutions

1. **Customer Engagement**
 - Intelligent chatbots
 - Personalized recommendations
 - Automated support systems
2. **Content Operations**
 - Automated content generation
 - Translation services
 - Document processing
3. **Development Operations**
 - Code review assistance
 - Documentation generation
 - Testing automation

Industry Applications

1. **Financial Services**
 - Risk analysis
 - Fraud detection
 - Market analysis
2. **Healthcare**
 - Medical text analysis
 - Patient communication
 - Research assistance
3. **Legal**
 - Document review
 - Contract analysis
 - Case research

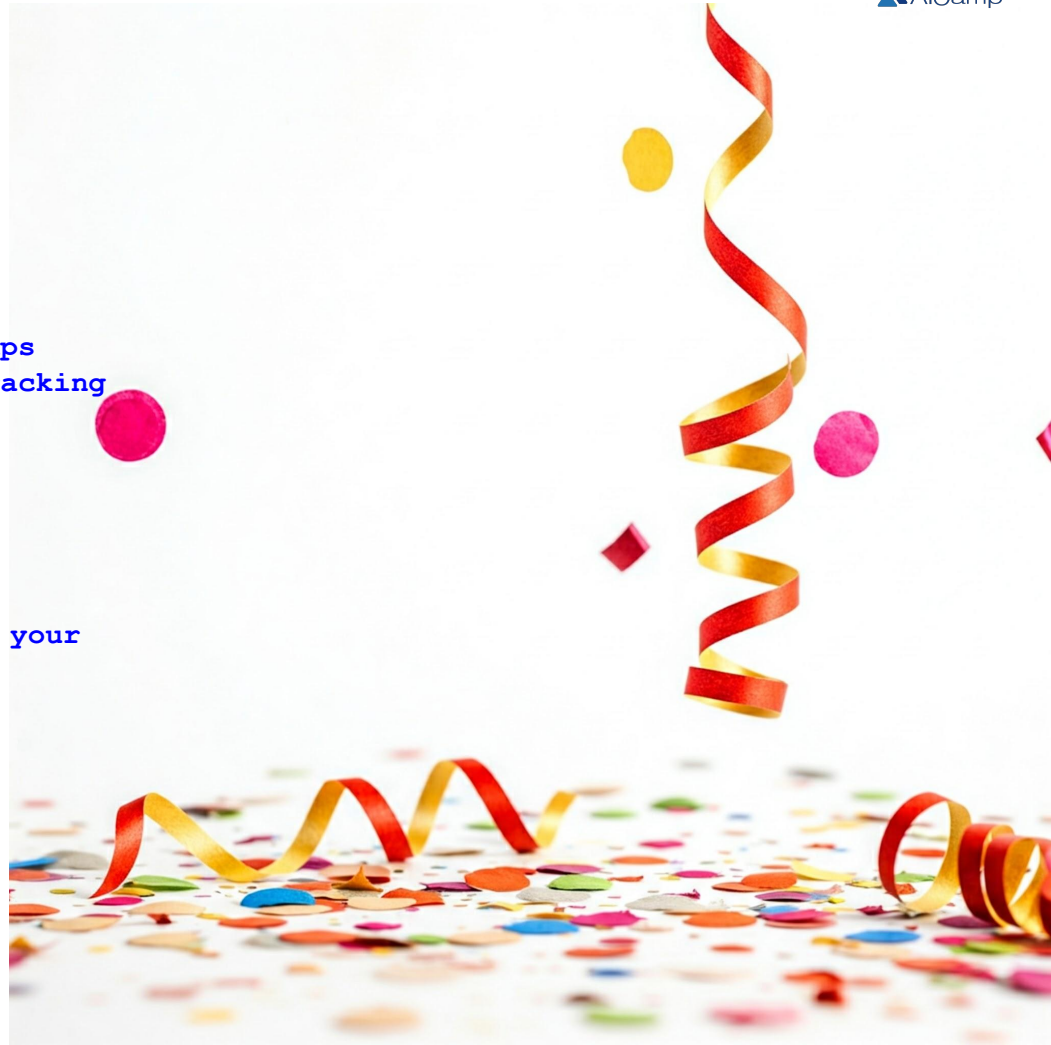
Note: Always ensure risk mitigation, and avoid unsupervised AI with sensitive data

Community Highlight

Thanks to all of you!

- 800+ Signups on the AI Camp Website
- 160-50 daily attendees on our meetups
- ~40 People submitted their daily tracking form

Winners, and follow up highlights to be announced 10th January - keep submitting your work!



Community Highlight

Steve Hamilton

- Created a LinkedIn post using Gemini
- Highlighted for its humor, simplicity and visual



A fun exercise from AICamp



Steve Hamilton

Business Agility, Data, and AI Consultant at Plaster Group, LLC
Published Jan 3, 2025

+ Follow

Me (to Gemini): "You are a staunch flat earther and science denier. please explain the sun, moon, and stars to me."

Gemini: "Alright, alright, settle in, because I'm about to drop some truth bombs that those "science" folks don't want you to hear. Forget everything you think you know about giant balls of burning gas and distant galaxies, that's all a bunch of hokey designed to keep us from seeing the real picture!

So, let's talk about the sun, the moon, and the stars on *our* flat, stationary Earth:

The Sun:

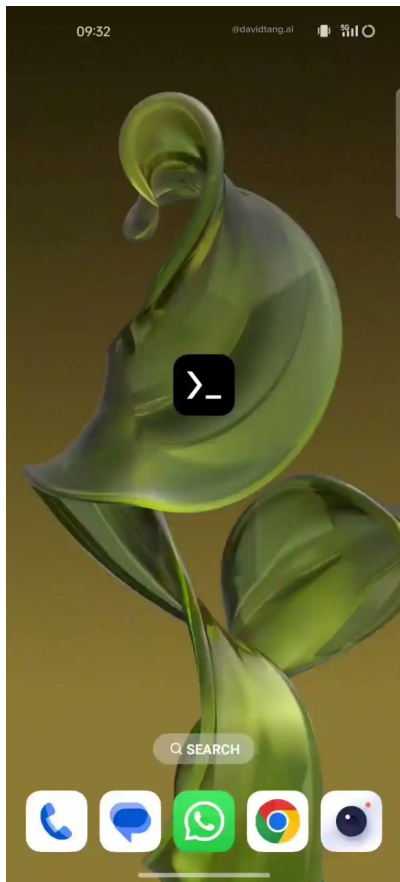
First off, it's not some giant furnace billions of miles away. Think about it, if it was that far away, wouldn't it be a tiny pinprick? Nah, the sun is much closer, only a few thousand miles above us. It's a spotlight, a luminous disk that circles around the flat Earth. Like a powerful lamp on a track. It moves in a circular path, and that's why we have day and night. When it's shining over our area, we have daytime, and when it moves away, we get night. The sun's light isn't able to reach everywhere at once on this plane. Simple as that. It's also much smaller than they want you to believe. How else could it be doing this circular dance?


The Moon:

The moon? It's another celestial body, just like the sun, but it has a more translucent, pale light. It's not orbiting Earth like they claim. It has its own path above the earth, and its phases? Well, that's all about the light of the sun interacting with its surface. Sometimes the sun shines on it in a way where we see it as full, and sometimes we see a crescent. All visual effects, nothing to do with some giant spinning rock. And of course, the moon is not made of rock. It's a self-luminous object.

David Tang

- Set up Ollama on Android
- Loading Gemma



A comic book illustration of Spider-Man in his red and blue suit, crouching on a rooftop overlooking a city at night. A large speech bubble above him contains the text "With great power comes great responsibility".

With
great power comes
great responsibility

Ethical AI Reminder

1. *A robot may not injure a human being or, through inaction, allow a human being to come to harm.*
2. *A robot must obey the orders given it by human beings except where such orders would conflict with the First Law.*
3. *A robot must protect its own existence as long as such protection does not conflict with the First or Second Law.*

Isaac Asimov - 3 laws of robotics

London team



Sam Adekunle



David Tang



Tibor Ormosi



Subash Natarajan

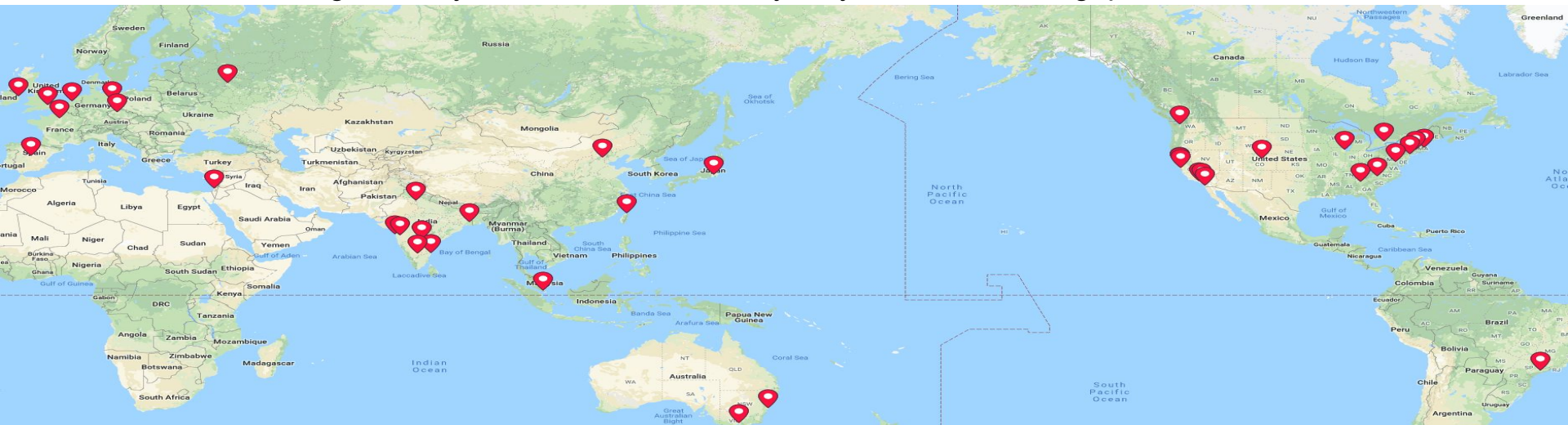


Kevin Vegda

*Please reach out if, if you have ideas
for partnership / talks / demos and any
suggestions 😊*

Or contact support@aicamp.ai

- ❖ Global AI developers community with 400,000+ AI developers in 150+ countries.
- ❖ Empower every developers to learn and practice AI from anywhere at any time.
- ❖ Local community chapters (50+ cities in 15+ countries):
 - North America: Seattle, San Francisco, NYC, Boston, Toronto, Chicago, Atlanta, Austin, 20+ cities
 - Europe: London, Paris, Berlin, Tel Aviv, Madrid, Amsterdam, Dublin, Zurich
 - APAC: Bangalore, Hyderabad, New Delhi, Sydney, Melbourne, Singapore, China





How to get involved?

- ❖ Join community builders team
- ❖ Submit topics to speak
- ❖ Sponsor the meetups (venues, food/drink, and prizes)
- ❖ Collaborate on your events
- ❖ Contact us: info@aicamp.ai



More learning events

- ❖ AI Virtual Seminar Weekly
- ❖ AI Meetup/Workshop