Speaker Bio: Geronyl S. Paragoso (Gee) is an experienced Software Engineer with over 5 years of industry expertise in full-stack development, specializing in Data Science, Progressive Web Applications, and Data Engineering. He has a proven track record of collaborating with international clients across Asia Pacific and North America to deliver impactful software solutions. Currently working as a freelance Software Engineer, Gee has extensive hands-on experience with AI and machine learning, including developing custom neural network platforms, facial recognition systems, and AI-powered applications. His recent projects include an AI Chat system that integrates local large language models with web search capabilities, demonstrating his deep understanding of both traditional and cutting-edge AI technologies. Passionate about making advanced technology accessible, Gee brings both technical depth and practical industry experience to his exploration of open source AI solutions.

Speaker Bio: Geronyl S. Paragoso (Gee) is an experienced Software Engineer with 5+ years in full-stack development, Data Science, and AI/ML applications. He has worked with international clients across Asia Pacific and North America, delivering solutions ranging from custom neural networks to facial recognition systems. His recent projects include an AI Chat system integrating local large language models with web search capabilities. Currently freelancing, Gee is passionate about making advanced AI technology accessible through open source solutions.

Topic: "Democratizing AI: Running Open Source Language Models Locally with Ollama"

Topic Description: Drawing from real-world experience building AI-powered applications and working with both cloud and local AI solutions, this presentation explores how Ollama is revolutionizing access to powerful language models. We'll cover the practical benefits of local AI deployment, demonstrate setting up and using various open source models, and discuss how this technology empowers developers and users with privacy, control, and freedom from proprietary AI services. The session will include live demonstrations, performance comparisons, and insights from actual implementation experience, showing how local LLMs can be integrated into real applications while maintaining cost efficiency and data sovereignty.

Plan:

Showing the open source models how it will use locally at our advantage

1. Text base llm models
2. Vision based llm models

Create example how to use in daily basis:

1. App that uses text base with duckduck go search or maybe open simple apps in local and anayze logs or output of local scripts
2. Vision that explain image or act as ocr

Advantage: Simple can run without internet

Democratizing AI: Running Open Source LLMs Locally with Ollama

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Slide 1: Title Slide

Democratizing AI: Running Open Source Language Models Locally with Ollama

Empowering developers with privacy, control, and freedom from proprietary AI services

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Slide 2: The Problem

Why Local AI Matters

• **Privacy Concerns** - Your data stays on your machine

• **API Costs** - No per-token charges or usage limits
• **Internet Dependency** - Works completely offline

• **Vendor Lock-in** - Freedom from proprietary services

• **Data Sovereignty** - Complete control over your AI pipeline

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Slide 3: What is Ollama?

Ollama: Your Local AI Powerhouse

• **One-command setup** - Download and run any open source LLM

• **Multiple model support** - Llama, Mistral, CodeLlama, Gemma, and more

• **API Compatible** - Drop-in replacement for OpenAI API

• **Resource efficient** - Runs on consumer hardware

• **Cross-platform** - Windows, Mac, Linux support

Slide 4: Text-Based Models

Text LLMs: The Foundation

Popular Models:

• **Llama 3.2** - General purpose, excellent reasoning

• **Mistral 7B** - Fast, multilingual capabilities

• **CodeLlama** - Code generation and debugging

• **Gemma 2** - Google's efficient model

• **Phi-3** - Microsoft's compact powerhouse

Use Cases: Chat, code generation, document analysis, content creation

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Slide 5: Vision-Based Models

Vision LLMs: See and Understand

Popular Models:

• **Llava** - Image analysis and description

• **Bakllava** - Enhanced visual reasoning

• **Moondream** - Lightweight vision model

Capabilities: • Image description and analysis • OCR (text extraction from images) • Visual question answering • Document processing

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Slide 6: Demo Applications

Real-World Use Cases

Text App: Local Assistant

• Analyze system logs and outputs

• Integration with DuckDuckGo search

• Script analysis and debugging

• Offline documentation helper

Vision App: Smart OCR

• Extract text from images/screenshots

• Analyze charts and diagrams
• Process receipts and documents

• Describe images for accessibility

Key Advantage: 100% offline capability

Slide 7: Why Choose Local AI?

The Ollama Advantage

✅ **Privacy First** - Your data never leaves your machine

✅ **Cost Effective** - No API fees, unlimited usage

✅ **Always Available** - No internet required

✅ **Customizable** - Fine-tune models for your needs

✅ **Open Source** - Transparent and community-driven

✅ **Enterprise Ready** - Data sovereignty compliance

Bottom Line: Democratizing AI means putting powerful models in everyone's hands, not just big tech companies.

Ollama Presentation Speaker Notes

Slide 1: Title Slide

Welcome everyone. Today we're exploring how to democratize AI by running powerful language models locally using Ollama. This isn't just about technology - it's about giving developers and organizations complete control over their AI infrastructure without depending on external services.

Slide 2: The Problem

Before diving into solutions, let's understand why local AI matters. Traditional cloud-based AI services create several challenges: your sensitive data gets sent to external servers, you pay per API call which can get expensive, you need internet connectivity, and you're locked into specific vendors. Local AI solves all these issues by keeping everything on your own hardware.

Slide 3: What is Ollama?

Ollama is a game-changing tool that makes running AI models locally as simple as installing any other software. With just one command, you can download and run sophisticated language models. It supports dozens of open-source models, provides OpenAI-compatible APIs, runs efficiently on regular computers, and works across all major operating systems.

Slide 4: Text-Based Models

Let's start with text models - the foundation of modern AI. Ollama supports popular models like Llama 3.2 for general reasoning, Mistral 7B for multilingual tasks, CodeLlama for programming,

Gemma 2 from Google, and Phi-3 from Microsoft. These models excel at chat, code generation, document analysis, and content creation - all running entirely on your machine.

Slide 5: Vision-Based Models

Beyond text, Ollama also supports vision models that can see and understand images. Models like Llava, Bakllava, and Moondream can analyze images, extract text through OCR, answer questions about visual content, and process documents. This opens up entirely new possibilities for local AI applications.

Slide 6: Demo Applications

Here's where it gets practical. For text applications, imagine having a local assistant that can analyze your system logs, integrate with search engines, debug scripts, and serve as an offline documentation helper. For vision applications, think smart OCR that extracts text from screenshots, analyzes charts, processes receipts, and describes images for accessibility - all without sending data anywhere.

Slide 7: Why Choose Local AI?

The advantages are compelling: complete privacy since data never leaves your machine, no ongoing costs or usage limits, works without internet, fully customizable for your specific needs, built on transparent open-source technology, and meets enterprise data sovereignty requirements. This is what democratizing AI really means - putting powerful capabilities directly in everyone's hands, not just big tech companies.

The bottom line: Ollama makes sophisticated AI accessible, private, and cost-effective for everyone.