

# AI Agents for Real Estate Professionals: William & Mary Executive Education Program

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**Instructor:** Dr. Cayman Seagraves

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## Course Overview

**Program:** William & Mary Executive Education Program **Time:** 3 hours total **Format:** Virtual Training via Zoom

**Platform:** n8n Cloud Platform **Target Audience:** Real estate executives, investment professionals, and business leaders

This focused workshop introduces you to AI agents and their practical applications in real estate. You'll move from foundational concepts directly to hands-on agent building, culminating in deploying a working Real Estate Market Expert Agent powered by live market data.

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## Meet Your Instructor



**Dr. Cayman Seagraves** Co-founder, [Agentic Assets LLC](#) Assistant Professor of Finance and Real Estate, The University of Tulsa  **Contact:** [cayman@agenticassets.ai](mailto:cayman@agenticassets.ai)

Specializing in AI transformation for real estate and finance industries, with expertise in multi-agent systems, automation, and strategic AI implementation. Dr. Seagraves brings both academic rigor and practical industry experience to help real estate professionals leverage cutting-edge AI technology for competitive advantage.

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## Key Learning Outcomes

By the end of this intensive 3-hour workshop, you will:

### **Understand AI Agents**

- Grasp the critical difference between AI agents and basic AI tools
- Learn how AI agents autonomously complete multi-step workflows
- Understand real estate-specific agent use cases and ROI impact

### **Build Working Agents**

- Deploy your first functional AI agent within the hands-on session
- Master the core patterns of agent architecture in n8n
- Create a Real Estate Market Expert Agent that pulls live Redfin data

### **Gain Competitive Advantage**

- Access advanced AI capabilities without deep technical expertise
  - Reduce hours spent on manual research and market analysis
  - Establish the foundation for scaling AI across your business operations
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## Pre-Course Preparation

### Technical Requirements

- **Laptop** with a web browser (Chrome, Safari, Firefox, or Edge)
- **Stable internet connection** (Zoom + n8n platform access)
- **Zoom** installed ([Download Zoom](#))

### Technical Setup Checklist

#### **Step 1: n8n Account & Project Setup**

1. **Create n8n cloud account** - [Sign up here](#)
2. **Create a dedicated project for the workshop:**
  - Once logged in, create a new project
  - Name it something like "W&M AI Workshop" or "AI Agent Training"
  - This keeps your workshop work organized and separate from personal projects
  - The instructor will NOT have access to your personal workflows—only this workshop project
3. **Add course instructor as a user** (optional, for live support):
  - Click the three dots in the bottom left corner → Settings
  - Go to the Users tab and invite: cayman@agenticassets.ai

The screenshot shows the n8n Settings interface. On the left is a sidebar with options: Personal, Users (selected), n8n API, External Secrets, Environments, SSO, LDAP, and Log Streaming. The main area is titled 'Users' and shows a list with one item: 'Cayman Seagraves (you)' with the email 'cayman@cayman.ai'. To the right of the user's name is the word 'Owner'. At the top right of the main area is a red 'Invite' button. A yellow bar at the top says 'Upgrade to unlock the ability to create additional admin users'.

## Step 2: API Keys & Credentials Setup

### 4. Obtain required API keys (create accounts first, then retrieve API keys):

#### Required for Workshop:

- [OpenRouter](#) - For LLM access. Create account → Get API key
- [Firecrawl](#) - For web scraping market data. Create account → Get API key

#### Recommended for Full Functionality:

- [Google Cloud Console](#) - Enable APIs for Gmail, Sheets, Drive (optional, for email/spreadsheet integration)

#### Optional for Advanced Workflows:

- [Pinecone](#) - Vector database for RAG (optional)
- [Perplexity](#) - AI research (optional)
- [Tavily](#) - Web search (optional)

### 5. Add credentials to your workshop project:

- Navigate to the "Credentials" tab in your n8n project
- Add each API key as a separate credential with descriptive names
- Test each credential to ensure connectivity
- **Security Note:** Credentials are project-specific and encrypted by n8n

The screenshot shows the n8n Credentials page for the 'Caiyman AI' project. On the left is a sidebar with 'n8n', 'Overview', 'Personal', 'Shared with you', 'Projects', and 'Caiyman AI' (selected). The main area is titled 'Caiyman AI' and shows the 'Credentials' tab selected. There are three credentials listed:
 

- PineconeApi account (PineconeAPI | Last updated 3 months ago | Created 23 February)
- ai\_agent\_knowledge\_rag\_chatbot (Telegram API | Last updated 3 months ago | Created 23 February)
- Telegram account (Telegram API | Last updated 3 months ago | Created 21 February)

 Each credential has a small icon, a name, a description, and a timestamp. To the right of the credentials are two buttons: 'Caiyman AI' and a three-dot menu icon. At the bottom right is a 'Create Workflow' button.

**Important:** Completing this setup before the workshop will ensure you can focus on learning rather than troubleshooting!

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## Course Curriculum (3 Hours)

### Session 1: AI Agents Overview & Context (30 min)

- Welcome and introduction to AI agents
- Understanding AI agents vs. basic AI tools (key conceptual differences)
- Real estate transformation opportunities and ROI impact
- Overview of n8n platform and visual workflow building

### Session 2: Hands-On Agent Examples Demo (45 min)

- **Agent Examples:** Explore pre-built agents demonstrating core patterns
- Live walkthrough of agent architecture and decision-making
- Understanding variables, data flow, and agent triggers
- Q&A and pattern recognition for your own use cases

### Break (15 min)

### Session 3: Build Real Estate Market Expert Agent (60 min)

- **Real Estate Market Expert Agent:** Hands-on construction
- Integrating Firecrawl for live Redfin market data scraping
- Building agent logic: data retrieval → analysis → formatting
- Testing and debugging your working agent
- Deploying to production for immediate use

### Session 4: Independent Practice & Q&A (30 min)

- Apply learned patterns to your own business challenges
- Troubleshoot issues with instructor support
- Discuss implementation strategies and next steps
- Final Q&A and resource review

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## Workflow Templates & Agents

### Agent Examples

- Pre-built demonstration agents showcasing core architectural patterns
- Includes: trigger logic, decision trees, data transformation, output formatting
- Reference guide for building your own agents

### Real Estate Market Expert Agent (Redfin)

- **Purpose:** Pull live property market data and generate market analysis
- **Data Source:** Redfin (via Firecrawl web scraping)

- **Capabilities:** Market trend analysis, property insights, competitive intelligence
  - **Output:** Formatted market reports ready for client presentations
  - **Deployment:** Ready to use immediately after the workshop
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## 📖 Course Materials

### Presentation

- **"AI Agents: The Real Estate Revolution"** - Comprehensive 15-slide presentation covering AI fundamentals, agent architecture, real estate use cases, and ROI frameworks

### Resource Library

All resources are available in the **Resources folder**:

### Learning & Setup

- 📋 [Pre-Course-Setup-Checklist.md](#) - Complete preparation checklist
  - 🔑 [API-Configuration-Cheat-Sheet.md](#) - Setup guide for all required services
  - 💡 [Real-Estate-Prompting-Best-Practices.md](#) - Advanced prompting techniques for optimal agent performance
  - 🛠️ [Troubleshooting-Quick-Reference-Card.md](#) - Emergency fixes and common solutions
  - 📱 [N8N-Assistant-System-Prompt.md](#) - System prompt reference for n8n multi-agent workflows
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## 📊 Workshop Deliverables

### What You'll Accomplish

- Understand the fundamentals of AI agents and their business impact
- Build and deploy a working Real Estate Market Expert Agent
- Gain hands-on experience with n8n visual workflow building
- Develop a framework for identifying agent opportunities in your business

### After the Workshop

- ⚡ Deploy your Market Expert Agent immediately for market research and competitive intelligence
  - 🎯 Apply learned patterns to other business processes
  - 📈 Measure efficiency gains and document ROI
  - 💬 Access ongoing resources and community support
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## 🔗 Important Links

### n8n Resources

- **n8n Homepage:** <https://n8n.io/>
- **n8n Documentation:** <https://docs.n8n.io/>
- **n8n Cloud Sign Up:** <https://app.n8n.cloud/register>

- **Official n8n Beginner Course:** <https://www.youtube.com/playlist?list=PLIET0GsrLUL59YbxstZE71WszP3pVnZfl>
- **n8n Community Forum:** <https://community.n8n.io/>

## Instructor & Resources

- **Agentic Assets Website:** <https://www.agenticassets.ai/>
- **Dr. Seagraves Academic Profile:** <https://www.caymanseagraves.com/>

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## 🚀 Beyond the Workshop

After completing this workshop, you'll have the foundational knowledge and working examples to expand AI agents across your organization.

### Ongoing Support & Collaboration

**I'm available for additional assistance** to help you expand and optimize your AI agent implementations. Whether you need help with advanced workflows, custom agent development, or strategic AI planning for your business, I'm here to support your continued success.

**Open to Partnership & Innovation:** I welcome opportunities to collaborate on new AI projects and real estate technology ventures. If you have ideas for improving real estate processes through AI, let's explore them together.

**Flexible Engagement Options:** From quick consulting calls to comprehensive business transformations, I offer a variety of support options tailored to your specific needs and goals.

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## 📋 Pre-Workshop Checklist

**To maximize your learning during the workshop, please complete this setup before attending:**

- Create n8n cloud account (<https://app.n8n.cloud/register>)
- Create dedicated "W&M Workshop" project in n8n
- Obtain OpenRouter API key and add to credentials
- Obtain Firecrawl API key and add to credentials
- (Optional) Set up Google Cloud APIs for email/spreadsheet integration
- Test all API credentials in n8n
- Download and install Zoom
- Review [Pre-Course-Setup-Checklist.md](#) for detailed instructions

**⚠️ IMPORTANT:** Complete technical setup before the workshop to maximize your hands-on learning time!

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## ✉️ Contact & Support

For questions or technical support before the workshop: **Email:** [cayman@agenticassets.ai](mailto:cayman@agenticassets.ai) **Website:** <https://www.agenticassets.ai/>

*This intensive workshop is designed to launch your AI agent journey. You'll leave with working agents, proven patterns, and the confidence to expand AI across your real estate business.*

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