

# LinkedIn Thought Leadership Agent

An agentic AI skills pack that transforms a single strategic intent into a 6-week LinkedIn content series — complete with narrative arcs, voice consistency, human-in-the-loop checkpoints, and automated posting via MCP.

**MSIS 549 B — Machine Learning & AI for Business Applications** University of Washington, Winter 2025-2026 |  
Homework 2: Agentic AI for Real-World Impact

## The Problem

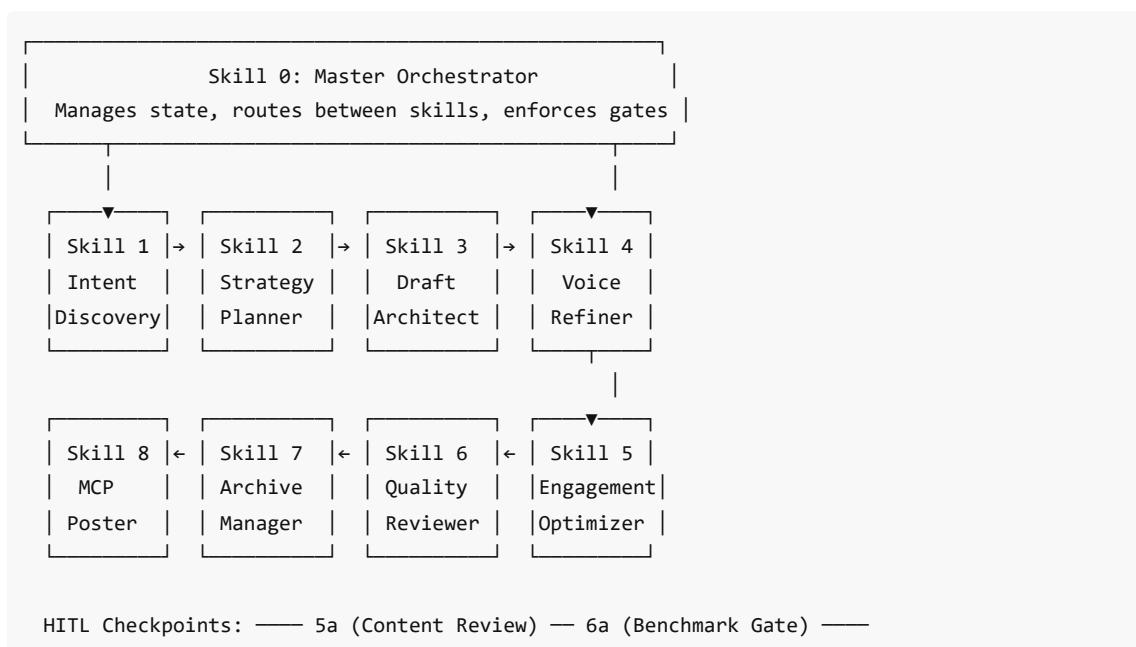
Creating consistent, high-quality LinkedIn thought leadership is time-consuming and cognitively demanding. Most professionals default to one of two failure modes:

1. **Generic AI output** — "In today's data-driven world..." posts that all sound the same
2. **Sporadic posting** — starting strong, then going silent for weeks

This system solves both by decomposing content creation into specialized skills that enforce quality, consistency, and strategic coherence across a 6-week publishing cadence.

## Architecture

The system follows **Path A** (Agentic Skills Pack) with **9 specialized skills** orchestrated by a master controller:



## Skills Summary

#	Skill	Purpose
0	Master Orchestrator	Pipeline control, state management, error recovery
1	Intent Discovery	5-question interview to extract strategic intent
2	Content Strategist	6-week narrative arc with Hook→Framework→Story→Tactics→Vision→CTA structure

3	Draft Architect	First drafts with anti-AI-ism rules (no "In today's...", no "Let's dive in...")
4	Voice & Tone Refiner	Detects and replaces 15+ AI patterns with human voice
5	Engagement Optimizer	LinkedIn-specific optimization (hooks, CTAs, hashtags, visuals) + HITL 5a
6	Quality Reviewer	5-metric scoring rubric (1-5 scale) + HITL 6a benchmark gate
7	Archive Manager	Structured archival with full metadata for reproducibility
8	Poster & Reviewer	LiGo MCP integration for automated LinkedIn posting

## Key Design Decisions

- Anti-AI-ism as a first-class concern** — Skills 3-4 contain explicit banned-pattern lists and replacement tables
- Two mandatory HITL checkpoints** — Content never publishes without human approval
- Narrative cohesion by design** — Skill 2 plans the full 6-week arc before any drafting begins
- MCP integration** — Skill 8 uses LiGo MCP for direct LinkedIn posting (with manual fallback)

## Benchmark Results

Test Case	Actionability	Voice	Depth	Cohesion	LinkedIn	Overall
SQL Performance (Agentic)	4.2	4.7	4.3	4.8	4.3	<b>4.5</b>
Data Cleanliness (Agentic)	4.2	4.2	4.0	4.5	4.0	<b>4.2</b>
WAL Protocol (Edge Case)	3.5	2.5	4.0	3.8	3.2	<b>3.4</b>
Vague Input (Ambiguous)	3.5	3.8	3.2	4.0	3.5	<b>3.6</b>
<b>Single-Prompt Baseline</b>	<b>2.5</b>	<b>2.2</b>	<b>1.8</b>	<b>1.0</b>	<b>2.5</b>	<b>2.0</b>

**Key finding:** The agentic system outperformed the single-prompt baseline by **+2.5 points** on the primary test case (4.5 vs 2.0). Biggest improvement was in Narrative Cohesion (+3.8), which a single prompt fundamentally cannot achieve.

See [benchmark/BENCHMARK\\_APPENDIX.md](#) for full methodology, scoring rubrics, and failure analysis.

## Repository Structure

```

├── README.md                                # This file
├── TUTORIAL_WRITEUP.md                      # Full tutorial (assignment submission)
└── skills/
    ├── skill_0_master_orchestrator.md        # Pipeline orchestration
    ├── skill_1_intent_discovery.md           # Strategic intent interview
    ├── skill_2_content_strategist.md         # 6-week arc planning
    ├── skill_3_draft_architect.md            # First draft generation
    ├── skill_4_voice_tone_refiner.md          # AI pattern detection & replacement
    ├── skill_5_engagement_optimizer.md       # LinkedIn optimization + HITL 5a
    └── skill_6_quality_reviewer.md            # 5-metric scoring + HITL 6a

```

```
|   └── skill_7_archive_manager.md      # Structured archival
|   └── skill_8_poster_reviewer.md      # LiGo MCP integration
└── benchmark/
    └── BENCHMARK_APPENDIX.md          # Full benchmark methodology & results
└── outputs/
    ├── Q1_2026_SQL_Performance_Series.md  # Generated 6-week series
    └── 2026_Roadmap_Plan.md                # Annual content roadmap
└── diagrams/
    └── architecture_infographic.html    # A4 landscape architecture diagram
└── archive/                            # Session archives (generated at runtime)
```

## How to Use

### Prerequisites

- Claude Code (or any Claude-based IDE with skill file support)
- Optional: [LiGo MCP](#) for automated LinkedIn posting

### Quick Start

1. Clone this repository
2. Copy the `skills/` directory to your Claude Code skills folder ( `~/.claude/skills/` )
3. Start a conversation and say: "*I want to create a LinkedIn thought leadership series about [your topic]*"
4. The orchestrator will guide you through:
  - **Intent Discovery** — 5-question interview to clarify your topic, audience, and message
  - **Content Strategy** — A 6-week narrative arc tailored to your intent
  - **Draft Generation** — 6 polished posts with anti-AI-ism enforcement
  - **Human Review** — Two checkpoints where you approve or revise content
  - **Publishing** — Direct to LinkedIn via MCP or manual copy/paste

### Example Input

```
Topic: Optimizing SQL Query Performance
Audience: Data Engineers & Business Stakeholders
Core Message: Continuous improvement in SQL is essential for AI-readiness
Anecdote: Business team frustrated when data wasn't in sync with AI models
Tone: Provocative + Educational
```

### Example Output

See [outputs/01\\_2026\\_SQL\\_Performance\\_Series.md](#) for the full 6-week series generated from the input above.

### Tech Stack

- **LLM:** Claude (via Manus AI agentic platform)
- **MCP Integration:** LiGo MCP for LinkedIn API access
- **Evaluation:** Human rubric scoring (5-metric, 1-5 scale)
- **Architecture:** Path A — Agentic Skills Pack (markdown skill files)

### Known Limitations

1. **Voice Consistency on technical topics** — Skill 4's voice refiner is optimized for Manager/Director audiences. Deeply technical audiences (e.g., database kernel engineers) score lower (2.5/5) because the

refiner over-simplifies jargon.

2. **Single-rater evaluation** — Benchmark scores are from one human evaluator. Inter-rater reliability with 2+ evaluators would strengthen the results.
3. **No A/B testing** — Posts haven't been tested against actual LinkedIn engagement metrics yet.

## License

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## Author

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