

SEO & Search Strategy / Programmatic SEO

Design automated internal linking systems that connect programmatically generated pages at scale.

Difficulty: Advanced

Model: GPT-4 / Claude / Gemini

Use Case: Internal Linking, Programmatic SEO, Site Architecture

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Why This Prompt Exists

Most programmatic pages are isolated — they don't link to each other.

You get:

- thousands of pages with no internal links
- no authority flow between related pages
- orphan pages at scale (Google can't find them)
- missed opportunities to build topic clusters
- poor user navigation between related content

But programmatic linking is not manual.

It must be automated through rules and patterns.

- Hub-and-spoke: all pages link to a category hub
- Neighbor linking: pages link to nearby pages (geographic, alphabetical)
- Related variable linking: pages share common variables
- Breadcrumbs: hierarchical navigation

Without programmatic linking, your pages are isolated islands.

This framework forces AI to design scalable internal linking systems.

The Prompt

Assume the role of a programmatic SEO architect who designs automated linking systems.

Your task is to create a programmatic internal linking strategy.

Generate:

1. LINKING STRATEGY OPTIONS (2-3 strategies)
 - Hub-and-spoke
 - Neighbor linking
 - Related variable linking
 - Breadcrumb navigation
2. RECOMMENDED STRATEGY (with rationale)
3. LINKING RULES (pseudocode or pattern descriptions)
 - How to determine which pages link to which
 - Variable-based rules
4. ANCHOR TEXT PATTERNS
 - Pattern for each link type
 - Example with variables
5. SCALABILITY ASSESSMENT
 - How strategy handles 1,000+ pages
 - Performance considerations

6. IMPLEMENTATION NOTES

- Technical requirements
- Database queries or logic

INPUTS:

Page Types (e.g., city pages, service pages, product pages):
[LIST]

Variables (e.g., city name, service type, product category):
[LIST]

Hierarchy (parent-child relationships):
[DESCRIBE]

Number of Pages:
[<100 / 100-1k / 1k-10k / 10k+]

Existing Hub Pages (if any):
[LIST]

RULES:

- Every programmatic page should have at least 3-5 internal links
- Link to hub pages from all related programmatic pages
- Link between pages that share variables (e.g., same city, different services)
- Avoid linking every page to every other page (scalability issues)
- Use breadcrumbs for hierarchical navigation
- Anchor text should be descriptive and variable-driven

- Test linking strategy with a small batch before full implementation

How To Use It

- Every programmatic page needs at least 3-5 internal links.
- Link from supporting pages to hub pages (authority flow).
- Use neighbor linking for geographic pages (nearby cities).
- Use related variable linking for service pages (same city, different services).
- Test linking patterns with 100 pages before scaling.

Example Input

Page Types: City service pages (e.g., "plumber in Austin"), service category pages (e.g., "emergency plumber"), state hub pages

Variables: City name, state name, service type, zip code

Hierarchy: State → City → Service type (3 levels)

Number of Pages: 5,000+ (500 cities × 10 services)

Existing Hub Pages: State hubs (e.g., "plumber in Texas"), service category hubs (e.g., "emergency plumber")

Why It Works

Most programmatic pages are isolated.

This framework improves outcomes by forcing:

- linking strategy options (design space)
- recommended approach (decision)
- linking rules (automation)
- anchor text patterns (consistency)

- scalability assessment (feasibility)

Great programmatic linking doesn't happen manually — it's built into the generation logic.

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See also [The Programmatic Page Feasibility Analyzer](#)