The Multiplier Effect

Why AI Is Your New Super-Intern

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Agenda:

1. The Gap: Prompting and AI-Integrated Workflows
2. Five-Block Prompting Framework
3. Few Shot Prompting
4. Live Demos: Copilot & MCP Server
5. AI Evaluation
6. Key Takeaways and Resources

Let's take a show of hands.

Who is already using AI at work?

THE GAP

01

Asking AI a question

02

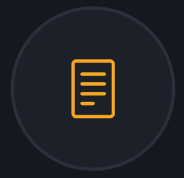
Embedding AI in the work

NO MATTER YOUR ROLE

What can you do with AI?

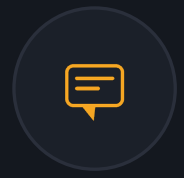
Data & Analytics

Clean. Query. Prototype.



Operations & Leadership

100 pages → 1 page.



Policy & Communications

Dense rules → plain language.

Project Management

Never start from blank.

EVOLUTION OF DATA WORK

01

Then:
write the query

Hand-crafted SQL. Memorized schemas. Hours of debugging.

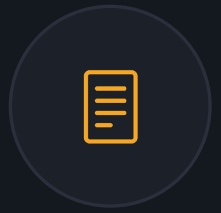
02

Now:
frame the intent

Business intent in, reliable analysis out.

SECURITY. GOVERNANCE. PRIVACY.

Two approved tools.



Microsoft 365 Copilot

Documents & daily operations

GitHub Copilot

Software development

AI PROMPTING BEST PRACTICES

Five blocks. Every time.

Structure is what turns a search engine into an analyst.

1. **ROLE**
   Who it is acting as
2. **TASK**
   The single objective
3. **CONTEXT**
   Background and business rules
4. **CONSTRAINTS**
   What it must not do
5. **OUTPUT FORMAT**
   How the answer is delivered

1 ROLE

2 TASK

3 CONTEXT

4 CONSTRAINTS

5 OUTPUT FORMAT

ROLE

You are an SRTA Operations Analyst reviewing official agency reporting documents for executive leadership.

Who is the AI in the room?

1 ROLE

2 TASK

3 CONTEXT

4 CONSTRAINTS

5 OUTPUT FORMAT

TASK

Analyze the 2024 SRTA Annual Report and extract key operational performance metrics, tolling performance, and milestone achievements from Fiscal Year 2024.

One clear objective.

1 ROLE

2 TASK

3 CONTEXT

4 CONSTRAINTS

5 OUTPUT FORMAT

CONTEXT

Source: 2024 SRTA Annual Report.
Contains revenue trends, express lane trip volumes, transit integration updates, and mobility milestones across Georgia express lanes.

The background it can't guess.

1 ROLE

2 TASK

3 CONTEXT

4 CONSTRAINTS

5 OUTPUT FORMAT

CONSTRAINTS

DO focus strictly on verified revenue, utilization and operational achievements. DO use concise executive language.
DON'T invent, extrapolate or estimate missing figures.
DON'T exceed 3 bullets.
DON’T exceed 400 characters.

What not to do.

1 ROLE

2 TASK

3 CONTEXT

4 CONSTRAINTS

5 OUTPUT FORMAT

OUTPUT FORMAT

A 3-bullet executive briefing:

- Tolling Revenue & Express Lane Performance
- Key Operational Milestones
- Executive Takeaway

Decision-ready, not a blob of text.

SAME REPORT. SAME ANALYST.

1 hour → 2 minutes

A decision-ready executive briefing, inside the enterprise boundary.

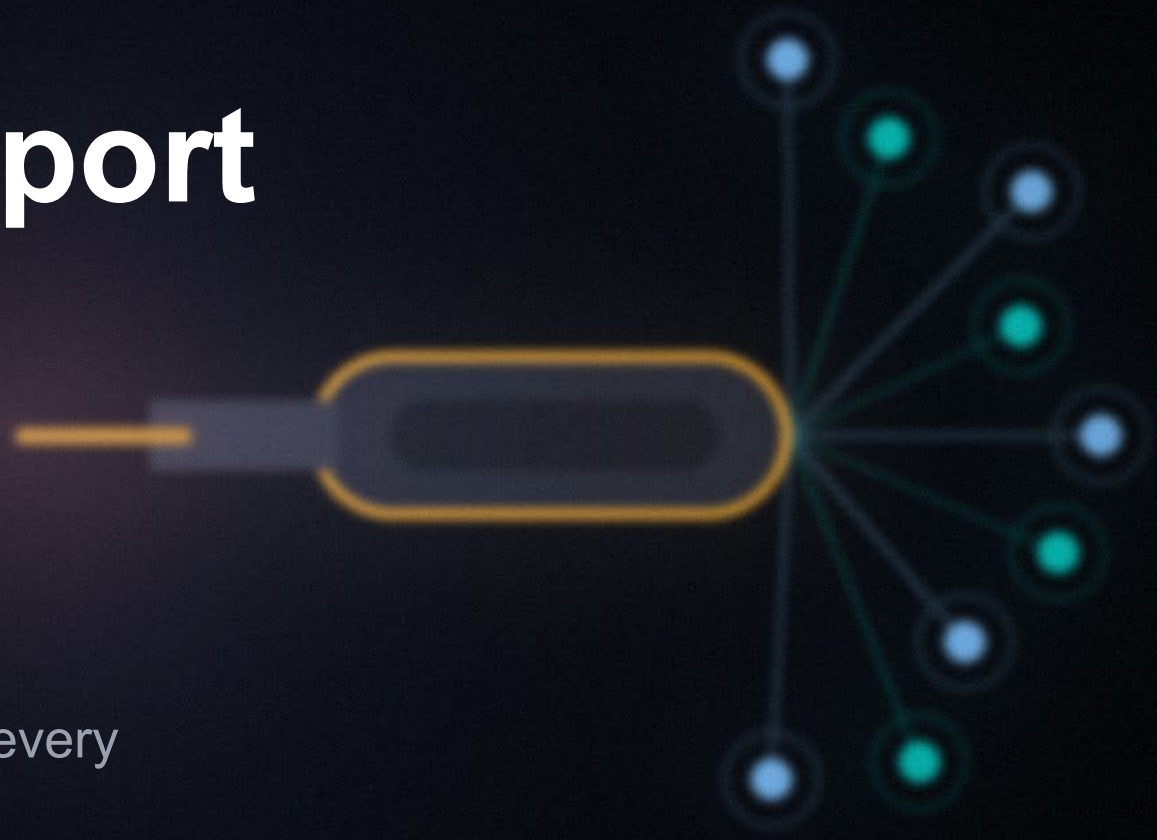
SAME FIVE BLOCKS

Few Shot Prompting.

Classifying ATL bus stops for shelter investment.

MODEL CONTEXT PROTOCOL (MCP)

MCP: The USB-C port for AI.



One secure bridge instead of custom code for every integration.

GITHUB COPILOT + MCP SERVER

Same five blocks. Now in VS Code.

Querying live ARC Open Data as a comment block.

1 ROLE

2 TASK

3 CONTEXT

4 CONSTRAINTS

5 OUTPUT FORMAT

ROLE

```
Senior Transportation Data Analyst
```

Same structure in VS Code.

GITHUB COPILOT — ARC OPEN DATA VIA MCP

1 ROLE

2 TASK

3 CONTEXT

4 CONSTRAINTS

5 OUTPUT FORMAT

TASK

Query the ARC Open Data MCP Server for 2025 vehicle-hours-of-delay by hour, and export as a spreadsheet.

Live data.

1 ROLE

2 TASK

3 CONTEXT

4 CONSTRAINTS

5 OUTPUT FORMAT

CONTEXT

```
Dataset: Vehicle_Hrs_Delay_2019_2025
Map Time → hour_of_day
Map F2025 → vehicle_hours_delay
```

Name the columns yourself.

1 ROLE

2 TASK

3 CONTEXT

4 CONSTRAINTS

5 OUTPUT FORMAT

CONSTRAINTS

```
Exclude Time = 'Total'.
Preserve source values.
Do not calculate or invent data.
```

Guardrails.

1 ROLE

2 TASK

3 CONTEXT

4 CONSTRAINTS

5 OUTPUT FORMAT

OUTPUT FORMAT

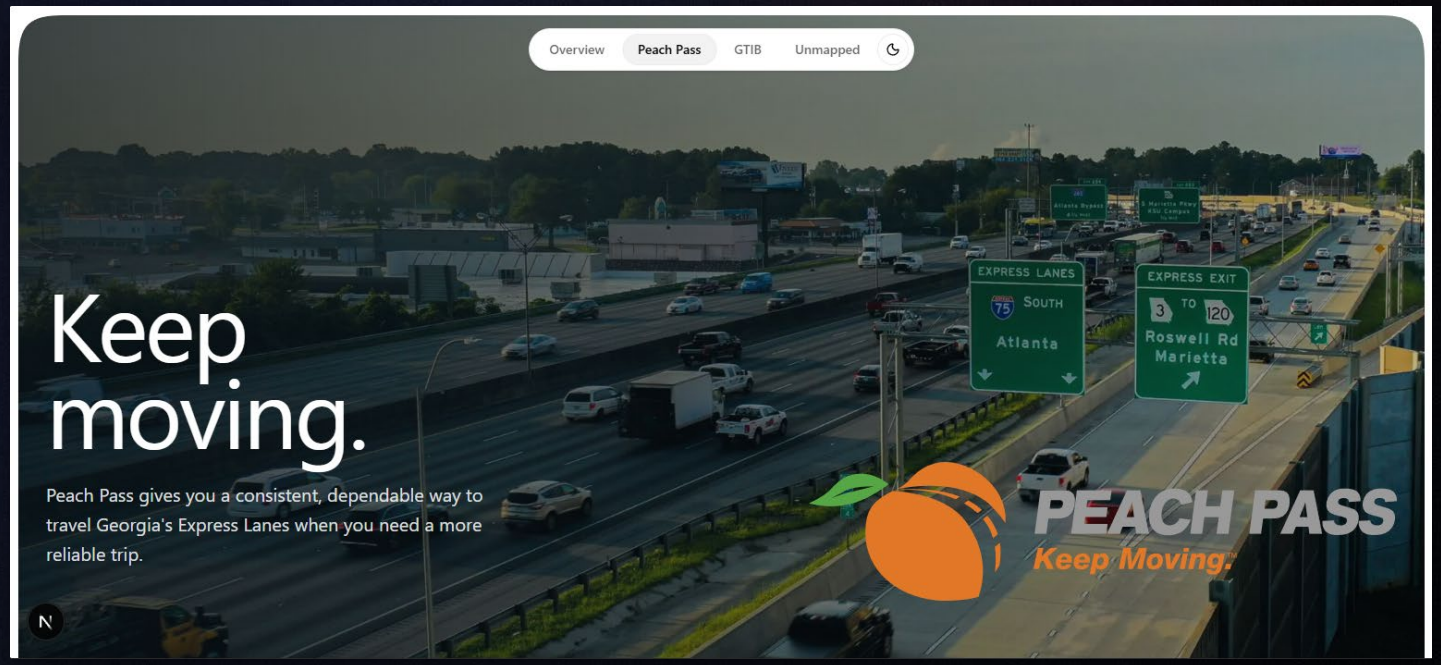
```
CSV — hour_of_day, vehicle_hours_delay
```

Correct output on the first pass.

LIVE DEMO

What’s possible with AI + MCP

- Five-part framework
- Automatically Updating App



Key Takeaways

- Gap: From Prompting to AI-Integrated Workflows
- Tools: Provided and Demonstrated Five Block Framework
- Transportation Use Cases: Summarization, Prioritization, Application Development
- Limitations
  - AI is not a replacement for domain expertise
- Opportunities
  - ROI: Recent analytics project saved between 170-425 hours
  - Amplified impact

Thank you.

Questions?

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ARC MCP SERVER

YOUTUBE PLAYLIST

Additional Resources

- Links for Learning: Playlist
  - https://www.youtube.com/channel/UCKWaEZ-_VweaEx1j62do_vQ
  - https://www.youtube.com/watch?v=k5jYwyhDMxA
  - https://www.youtube.com/watch?v=Qx0fCqpkBus
  - https://www.youtube.com/@BurkeHolland
  - https://www.youtube.com/watch?v=QoQBzR1NIqI
- Links to MCP Server:
  - https://github.com/lisanmejia/atlantaregionalcommission-opendata-mcp
  - https://www.npmjs.com/package/arc-opendata-mcp

Appendix