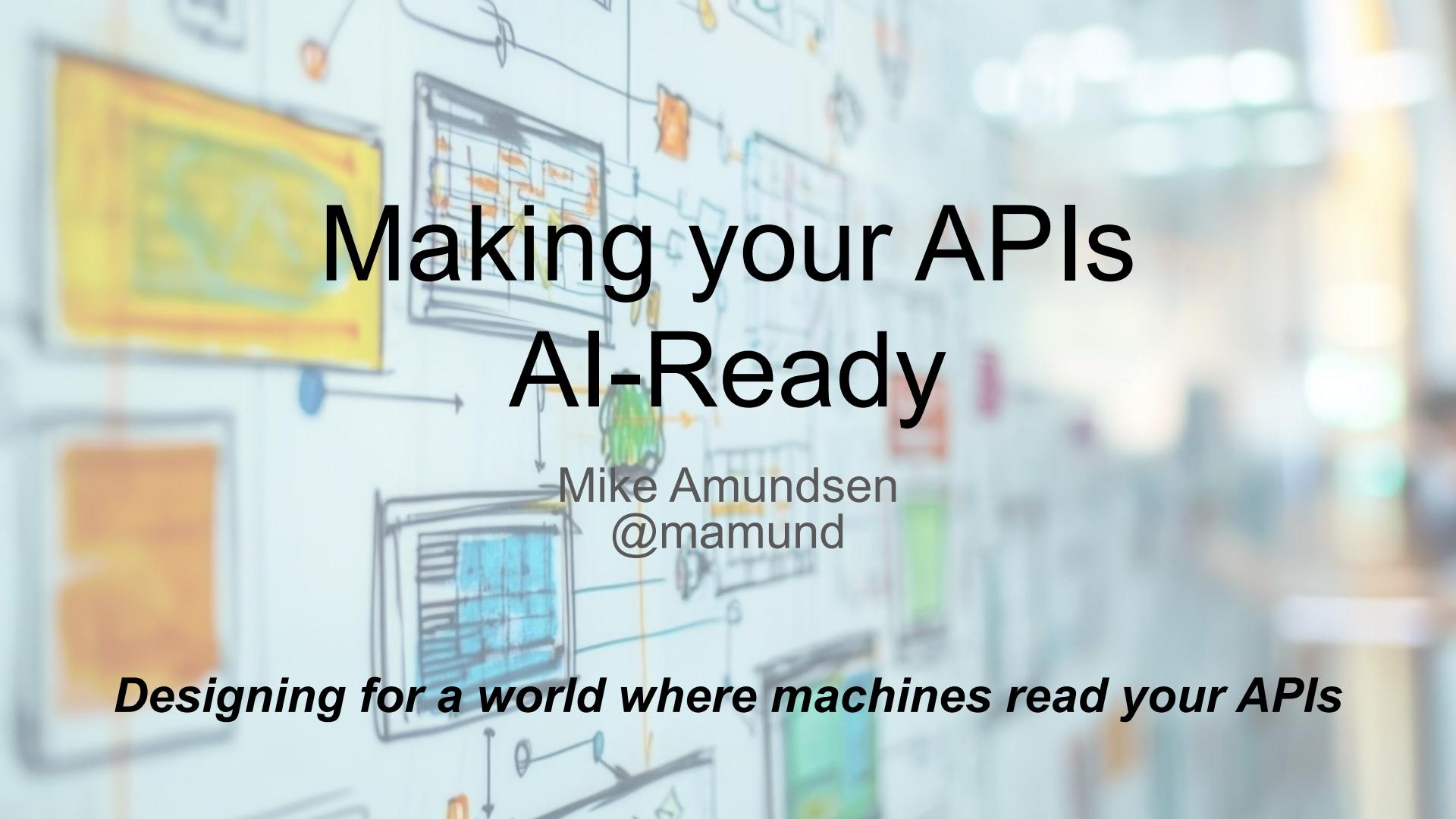


Making your APIs AI-Ready



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Designing for a world where machines read your APIs

Bridging LLMs and APIs with MCP

Bridging LLMs & APIs with MCP : Overview



- What is MCP?
- What does an MCP server do?
- MCP and our five shifts
- What we can do right now

Bridging LLMs & APIs with MCP

"Systems work best when the information guiding them is clear, timely, and visible."

- Donella Meadows



Bridging LLMs & APIs with MCP : What is MCP?

- Model-Context Protocol (MCP) is a standard from Anthropic
- MCP makes it possible for LLMs to find and use APIs
- MCP is an adaptor



MCP makes discovery possible

Bridging LLMs & APIs with MCP : What does MCP do?

- MCP exposes capabilities and context (manifest)
- MCP standardizes LLM/API interaction (JSON RPC 2.0)
- Publishing an MCP server exposes your APIs to agents

```
1 {
2   "name": "Task Management MCP Server",
3   "version": "1.0.0",
4   "description": "Expose task management capabilities as MCP tools for autonomous agents",
5   "endpoints": [
6     {
7       "type": "http",
8       "url": "https://api.example.com/mcp",
9       "supports_streaming": false
10    }
11  ],
12  "configSchema": {
13    "type": "object",
14    "properties": {},
15    "required": []
16  },
17  "capabilities": {
18    "tools": true,
19    "resources": false,
20    "prompts": false
21  },
22  "tools": [
23    {
24      "name": "home",
25      "description": "Navigate to the API home document. ALPS id: goHome.",
26      "input_schema": {
27        "type": "object",
28        "properties": {},
29        "required": []
30      }
31    },
32    {
33      "name": "listTasks",
34      "description": "Retrieve the full collection of tasks. ALPS id: goTaskList.",
35      "input_schema": {
36        "type": "object",
37        "properties": {
38          "filter": {
39            "type": "string"
40          }
41        },
42        "required": []
43      }
44    }
45  ]
46 }
```

```
1 {
2   "name": "Task Management MCP Server",
3   "version": "1.0.0",
4   "description": "Expose task management capabilities"
5   "endpoints": [
6     {
7       "type": "http",
8       "url": "https://api.example.com/mcp",
9       "supports_streaming": false
10      }
11    ],
12   "configSchema": {
13     "type": "object",
14     "properties": {},
15     "required": []
16   },
17   "capabilities": {
18     "tools": true,
19     "resources": false,
20     "prompts": false
21   },
22   "tools": [
23     {
24       "name": "home",
25       "description": "Navigate to the API home document",
26       "input_schema": {
27         "type": "object",
28         "properties": {},
29         "required": []
30       }
31     },
32     {
33       "name": "listTasks",
34       "description": "Retrieve the full collection of tasks. ALPS id: goTaskList.",
35       "input_schema": {
36         "name": "filterTasks",
37         "description": "Retrieve a filtered list of tasks using filterCriteria",
38         "input_schema": {
39           "type": "object",
40           "properties": {
41             "title": { "type": "string" },
42             "dueDate": { "type": "string", "format": "date" },
43             "status": { "type": "string" },
44             "priority": { "type": "integer" },
45             "assignedUser": { "type": "string" }
46           },
47           "required": []
48         },
49         "response_schema": {
50           "type": "object",
51           "properties": {
52             "tasks": {
53               "type": "array",
54               "items": { "$ref": "#/definitions/taskItem" }
55             }
56           }
57         }
58       }
59     }
60   }
61 }
```



*MCP exposes API capabilities and
standardizes API interaction*

Bridging LLMs & APIs with MCP : The Five Shifts

- Intentions : MCP focuses on describing API intent
- Context : MCP adds capability details to the LLM context
- Standardization : MCP standardizes API/LLM interactions
- Discovery : MCP advertises actions as LLM “tools”
- Observation : MCPs generate signals that guide improvement



MCP enables your shift to AI-Ready APIs

Bridging LLMs & APIs with MCP : What we can do now

- Add “intention-style” identifiers to your API operations
- Focus on clear, complete input schemas
- Standardize response formats (including errors)



*Improved context metadata
empowers your MCP servers*

Bridging LLMs & APIs with MCP : Summary



- What is MCP?
 - An adaptor protocol for your APIs
- What does an MCP server do?
 - exposes capabilities, standardizes interactions
- MCP supports the five shifts
 - It enables your shift to AI-Ready APIs
- What we can do right now
 - Improving your context metadata empowers MCP servers



*MCPs are the bridge between
LLMs and your API*

MCP Servers : Quick Quiz

7.1 MCP stands for _____

- A. Multi-Connection Publishing
- B. Model-Context Protocol
- C. Master Control Program
- D. Mounted Canadian Police

7.2 What does an MCP server do?

- A. randomly generates API responses
- B. hides your API from AI-agents
- C. releases your API documentation for users to read
- D. exposes capabilities and context through the mcp.json manifest

7.3 MPCs are the bridge between LLMs and _____

- A. human programmers
- B. telephone switches
- C. your API
- D. RAG learning systems

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