From `jupyter execute` to Production

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1. Introduction

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AI agents × Databricks notebooks

2. The Vision

What you'll take away:

- AI agents executing Databricks notebooks from CLI

- Practical patterns from production

- Open source tool available today

3. The Solution

My Project: https://github.com/i9wa4/jupyter-databricks-kernel

- CLI notebook execution

- Remote execution on Databricks

- AI assistant integration

- Autonomous iteration

4. Demo Environment

My Project: https://github.com/i9wa4/databricks-ai-starter on GitHub Codespaces

Prompt: > Describe the schema of samples.nyctaxi.trips, then create and execute a notebook with one histogram of trip distances.

5. CLI Execution Example

For example:

$ jupyter execute demo_nyctaxi.ipynb –kernel_name=databricks

6. Complete Remote Execution

All code runs on Databricks, not locally

- Databricks Runtime libraries available

- No local environment setup

- Independent agent iteration

7. Reviewing Results

Notebook execution completes with visualizations and analysis outputs.

8. Why This Matters

- **Credible:** Production use at GENDA

- **Useful:** Open source, available today

- **Timely:** Autonomous AI agents

9. Development Workflow

Dev = Production runtime

Deploy via Databricks Asset Bundles

10. Get Started

My Project: https://github.com/i9wa4/jupyter-databricks-kernel

Thank you.