Common Pitfalls with Structured Outputs

Predictable failure modes and how to prevent them

Design Pitfalls

- Over-engineering simple tasks
- Schema too rigid for evolution
- Validation too strict
- No versioning strategy

Operational Pitfalls

- Cost blindness
- No fallback when validation fails
- Single point of failure
- Inadequate error logging

Data Pitfalls

- Ignoring edge cases
- Insufficient testing on real data
- No monitoring for drift
- Missing confidence scores

Prevention Strategies

Test Extensively:
Use real messy data, not clean examples

Design for Failure:
Graceful degradation, fallback mechanisms

Monitor Continuously:
Track validation failures, schema drift

Version Schemas:
Enable evolution without breaking changes

Start Simple:
Add complexity only when needed

Document Edge Cases:
Known limitations and workarounds

Robust systems anticipate and prevent these pitfalls from day one