



AgentPayment Sandbox

Sivasubramanian Ramanathan
*Product Owner | Fintech & Innovation
Ex-BIS Innovation Hub Singapore*

 **Seeking Opportunities in Singapore**
Product Management • Fintech • Payments •
RegTech

"I am a Product person. **I build.**"

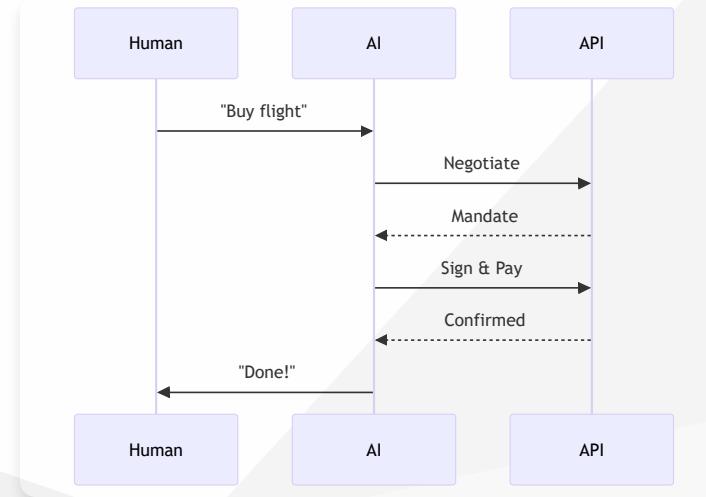
I have worked across product delivery, user research, and cross-agency collaboration. I enjoy solving complex problems.

I care deeply about building products that create real impact.

The Vision: Agents Will Shop For You



We are moving from a world where **humans click buttons** to a world where **agents negotiate protocols**.



The Paradigm Shift

- **Today:** Humans navigate UI, solve CAPTCHAs, enter details.
 - **Tomorrow:** Agents use UCP to discover products and fill carts.
- “**Prediction:** By 2027, a significant % of eCommerce will be Agent-to-Agent.”

The Reality: A Testing Nightmare

The infrastructure is here, but it is fragmented.

Protocol	Company	Approach
UCP	Google + Partners	Universal Commerce
ACP	Shopify + OpenAI	E-commerce checkout
x402	Coinbase	Micropayments
AP2	Agent Standard	Mandate-based A2A

“ **The Problem:** Developers need to validate signatures, parse headers, and handle mandates across 4 disparate specs. ”

The Developer Pain Point 😱

"I am building an AI shopping agent. How do I test it?"

Option A: Real Test Accounts 💰

- Sign up for Stripe/Shopify.
- Get API keys.
- Configure webhooks.
- **Days of setup.**

Option B: Build Mock Servers 🔧

- Read 4 different PDF specs.
- Code endpoints from scratch.
- Handle encryption manually.
- **Weeks of work.**

“ There was no "Postman for Agent Payments". So I built one. ”

Introducing APS



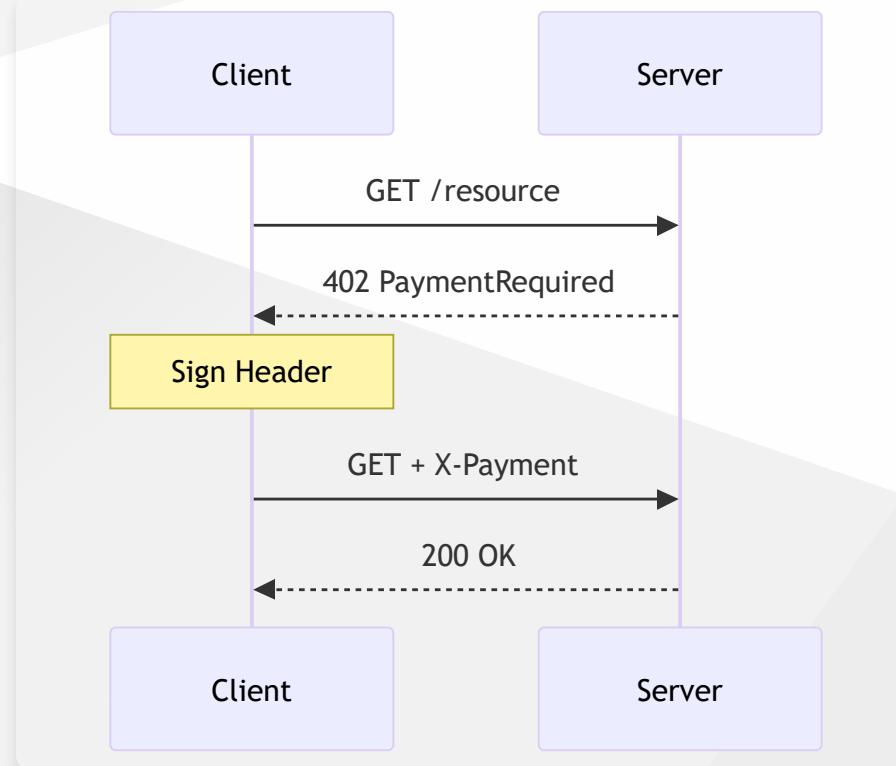
Unified Sandbox for Agentic Commerce

Error 404: Not Found

- **Mock Servers:** Instant endpoints for UCP, ACP, x402, AP2.
- **Inspector:** Validates requests against schemas.
- **Security:** Verifies EIP-712 signatures.
- **Playground:** Learn by doing in the UI.

Flow 1: x402 (Coinbase) ⚡

For Micropayments & Metered Access.

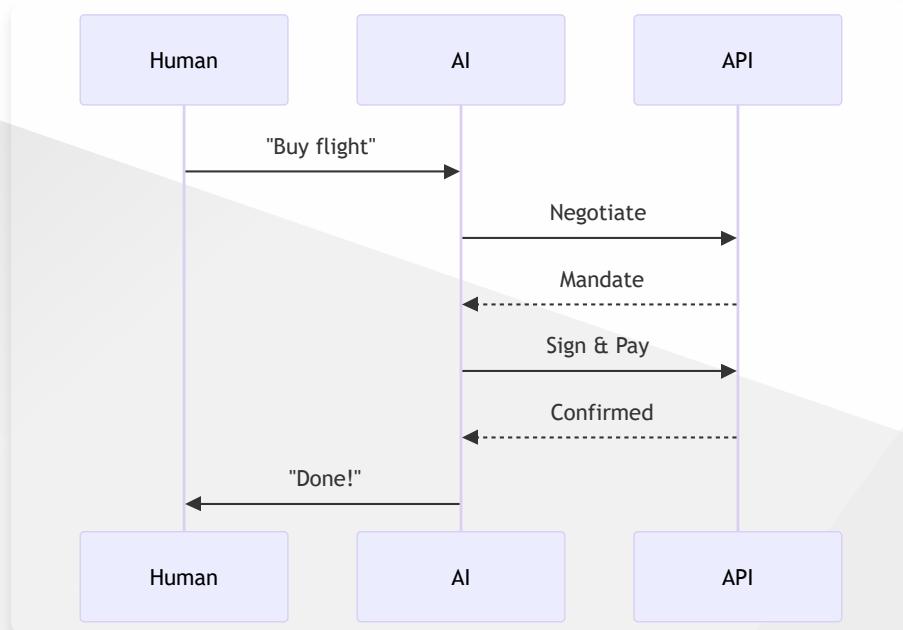


What APS Tests

1. **Header Parsing:** Can agent handle 402 Payment Required ?
2. **Signatures:** Is `x-Payment` header valid?
3. **Payload:** Does payment match price?

Flow 2: AP2 (Agent Standard) 🤖

High-Trust Mandates for Agent-to-Agent.



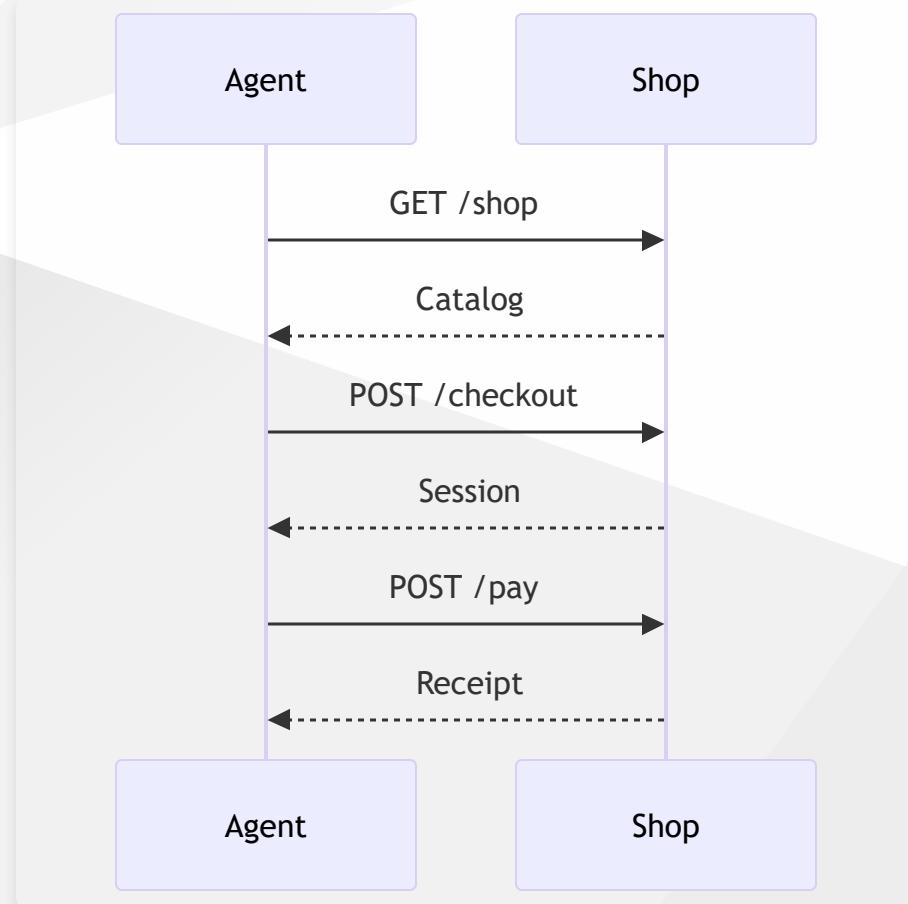
What APS Tests

1. **Discovery**: Finding `/well-known/a2a`.
2. **Mandates**: Respecting spending limits.
3. **OTP**: Handling user approval.

Flow 3: ACP (Shopify + OpenAI)



Specialized for E-commerce Checkout.

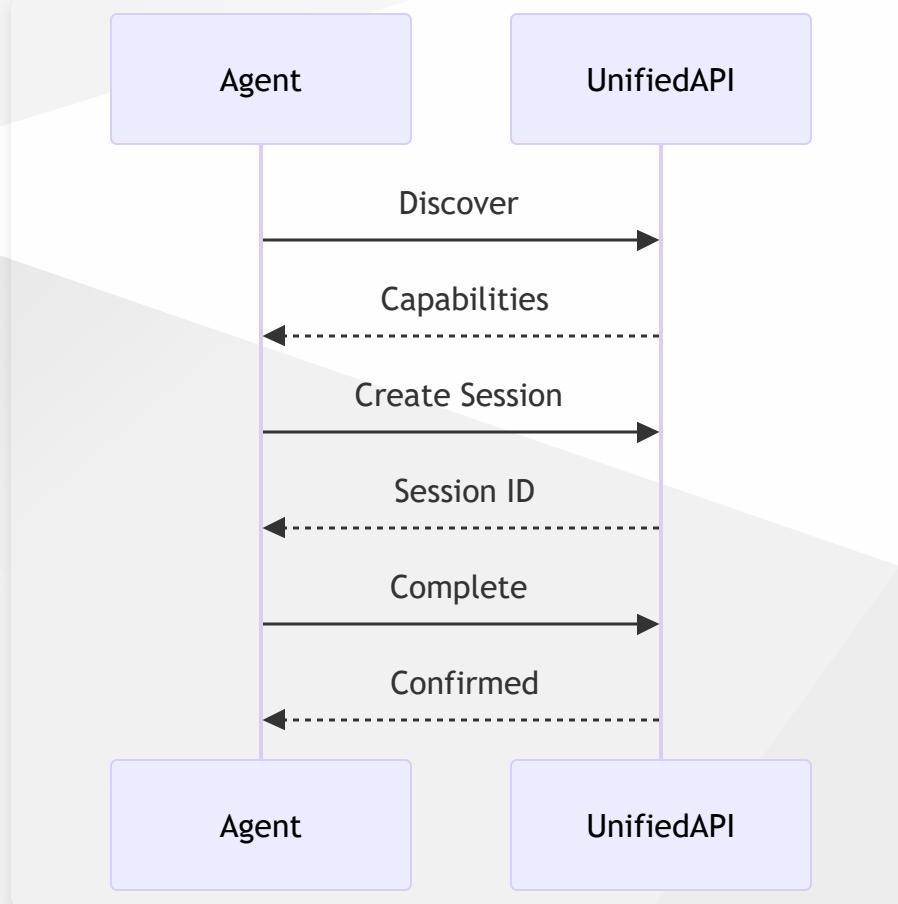


What APS Tests

1. **Sessions**: Maintaining state.
2. **Variants**: Selecting size/color.
3. **Checkout**: Validating payments.

Flow 4: UCP (Google + Partners)

Universal Commerce Protocol (Shopify, Stripe, Visa, etc)



What APS Tests

1. **Discovery**: Unified product search.
2. **Carts**: Filling carts autonomously.
3. **Purchase**: Completing orders.

Demo Mode: GitHub Pages

How I deployed a backend-heavy app to static hosting.

The Challenge

GitHub Pages = No Server.
API calls usually fail.

The Solution

- **Context-Aware API:** Detects `github.io`.
- **Service Worker Logic:** Intercepts requests.
- **Mock Data Layer:** Returns valid JSON responses.

```
// frontend/src/services/api.ts
const IS_DEMO = window.location.hostname
  .includes('github.io');

if (IS_DEMO) {
  return MOCK_DATA.ap2_response;
}
```

“ **Result:** A frictionless live demo.”

About Me



Sivasubramanian Ramanathan

Product Owner | Fintech, Payments & Innovation

I specialize in **simplifying complexity**.

- **Experience:** BIS Innovation Hub Singapore (CBDCs, Cross-Border Payments).
- **Skills:** Product Management, Rapid Prototyping, Technical Strategy.
- **Focus:** Bridging Policy/Regulation and Engineering.

Let's Connect

I am ready to bring this level of product thinking and execution to your team.

-  **Portfolio:** sivasub.com
-  **LinkedIn:** linkedin.com/in/sivasub987
-  **Code:** [GitHub/APS](#)
-  **Docs:** [Documentation](#)

Live Demo:
siva-sub.github.io/AgentPayment-Sandbox