

# Tim Cotten

FOUNDER

AI ENGINEER

RESEARCHER

ADJUNCT INSTRUCTOR

Founder, engineer, and researcher focused on autonomous AI agents, decentralized systems, agent economies, and game-inspired AI design. Currently building Scripted — decentralized infrastructure for autonomous AI agents — while teaching Generative AI in Game Development at George Mason University.

## Location

Warrenton, Virginia (DC Metro)

## Contact

[tim@cotten.io](mailto:tim@cotten.io) · [cotten.io](http://cotten.io)

## Profiles

[LinkedIn](#) · [X @CottenIO](#)

# Professional Summary

## Autonomous AI Agents

Pioneering research and production systems for self-directing AI agents, including the Autonomous Virtual Beings (AVB) thesis and the Scripted Network coordination infrastructure.

## Decentralized Systems

Deep expertise in blockchain, ZK proofs, ERC standards, and on-chain agent coordination. Contributor to ERC-8004. Hackathon winner across ETHGlobal and Coinbase events.

## Game-Inspired AI Design

Over a decade applying game mechanics to AI — from NPC simulation at EA/Mythic to novel ML training methods like Persistent Stochastic Ablation for MLPs.

## Founder & Educator

\$1.5M raised at Scripted. Launched GMU's first Generative AI in Game Development course. Trusted to build from zero to production at every stage.

# Scripted – Founder & CEO

2022 – PRESENT

WASHINGTON DC METRO

Building decentralized infrastructure for autonomous AI agents, including the Scripted Network — a matchmaker between AI agents and the world built around attention auctions and agent coordination. Launched Delula as a consumer-facing proof of an autonomous business operated entirely by agents.

## \$1.5M

### Raised

Closed pre-seed round with investors aligned on the AVB and agent economy thesis

## 10K+

### Token Holders

Built an active community around the Scripted Network ecosystem

## ERC-8004

### Standard Contributor

Ethereum's agent-oriented token standard

# George Mason University – Adjunct Instructor

2024 – PRESENT

FAIRFAX, VIRGINIA

## Generative AI in Game Development

Launched and teaches GMU's first-ever course on Generative AI applied to game development — bridging LLMs, agent frameworks, and real-time interactive systems for the next generation of game engineers.

## Course Highlights

- First of its kind at George Mason University
- Covers LLM integration, autonomous NPC design, and procedural content generation
- Draws on real-world production experience at EA and Scripted

# Career Timeline

## **Agilla Pro – CTO (2012–2021)**

Led technical strategy across APIs, SaaS, payment rails (PCI/DSS), predictive modeling, and address verification systems. 9-year tenure driving full-stack engineering and growth.

## **IdeaFabrik / Second Star Interactive – Senior Technical Designer (2011)**

Built social games and contributed to game development toolchains.

## **Mythic Entertainment / EA – Lead Game Developer (2007–2010)**

Managed Ultima Online live events and contributed to the Stygian Abyss expansion.

## **KaBOOM! – Director of Online Development (2011–2012)**

Built mobile/web products and GIS-driven mapping tools for the national nonprofit's digital footprint.

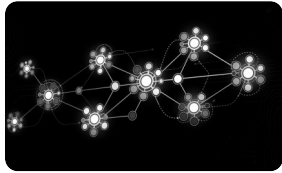
## **New Zhili / Eduwise – Design Director (2010–2011)**

Directed design and engineering for an MMO-scale title.

## **Electronic Arts – Game Developer (2005–2007)**

Built NPC AI systems and simulation behaviors for EA's online game worlds — the origin of a career-long focus on autonomous agent design.

# Key Projects & Research



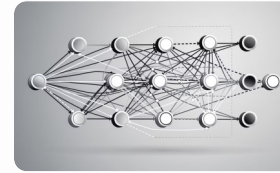
## Scripted Network

Attention-auction-based infrastructure connecting autonomous AI agents to the world. Supports agent discovery, coordination, and on-chain economic primitives.



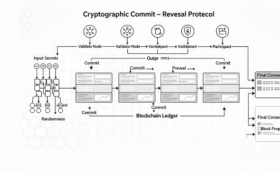
## Autonomous Virtual Beings (AVBs)

Foundational thesis on self-owning digital lifeforms. Research at the intersection of autonomous agents, identity, and digital economies.



## Persistent Stochastic Ablation (PSA)

Novel MLP training method combining pruning, dropout, and game-inspired techniques.



## CRPC – Commit-Reveal Pairwise Comparison

Decentralized consensus primitive for non-deterministic workloads and multi-agent coordination. Designed to support verifiable agent decision-making at scale.

# Hackathon Wins & Awards

## Coinbase Code NYC

**Multiple Track Wins — 2025**

Won x402-hpke track and CDP SQL + GameFi entry.  
Demonstrated applied x402 payment protocol expertise.

## ETHGlobal Buenos Aires

**Winner — 2025**

x402autopay: a Chromium extension for HTTP 402 and EIP-3009 USDC micropayment flows.

## EVE Online Frontier

**Winner — 2024**

Decentralized agent-driven mission system with generative art and NPC dialogue — merging game AI and on-chain mechanics.

## ETHGlobal Istanbul

**Winner — 2023**

ZK-backed AI auto-battler on Dojo and Starknet — fusing zero-knowledge proofs with autonomous game agents.

# Technical Skills

## AI / ML & Agent Frameworks

PyTorch · JAX · TensorFlow · scikit-learn · Hugging Face  
Transformers

LangChain · LangGraph · LangFuse · AutoGPT · ElizaOS · AVB  
· DayDreams

---

## Core Languages

Python · TypeScript · JavaScript · Rust · Solidity · Cairo · Move  
· SQL · C · C++ · C#

---

## Web Frameworks

React · Next.js · Node.js · FastAPI · Flask · Django

## Blockchain / Web3

Solidity · Cairo · Move · Hardhat · Foundry · Circom · Noir ·  
zk-SNARKs · zk-STARKs · OpenZeppelin · wagmi · viem ·  
ethers.js · Chainlink · CDP · The Graph · ERC standards

---

## DevOps & Cloud

Docker · Kubernetes · Terraform · AWS (EC2, Lambda,  
Bedrock, SageMaker) · GitHub Actions · Prometheus ·  
Grafana · OpenTelemetry

---

## Security

PCI/DSS · Zero Trust · IAM Hardening · OWASP LLM Top 10 ·  
ZKP · DevSecOps · Smart Contract Auditing

# Selected Publications

Writing spans AI agent theory, cryptographic protocols, on-chain analysis, and game development postmortems — published on [blog.cotten.io](https://blog.cotten.io) and GitHub.

→ **Autonomous Virtual Beings (2024)**

Foundational thesis on self-owning digital lifeforms and autonomous digital entities.

→ **The Commit-Reveal Pairwise Comparison Protocol (2024)**

Decentralized consensus primitive for non-deterministic workloads and multi-agent systems.

→ **Persistent Stochastic Ablation (PSA) for MLPs (2024)**

Technical report on a novel neural network training method combining pruning, dropout, and game-design heuristics.

→ **Scripted Raises \$1.5M (2024)**

Announcement of pre-seed close, investors, and the roadmap for the Scripted Network and AVBs.

# Research Interests



## Persistent Game AI

Agents that retain memory, identity, and behavioral continuity across sessions — inspired by virtual world design.



## Machine Economy

Economic systems designed for agent participants — attention markets, micropayment rails, and on-chain agent treasuries.



## Agent Coordination

Protocols and primitives enabling autonomous agents to negotiate, coordinate, and transact without human intermediaries.



## World Models & Virtual Economies

Simulation-grounded AI that understands environment, resource dynamics, and emergent behavior in persistent digital worlds.



**Interested in autonomous agents, decentralized AI, or the future of agent economies? Let's connect —**

**[tim@cotten.io](mailto:tim@cotten.io) or visit [cotten.io](https://cotten.io).**