

Michael Tjemmes

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Experience

Tangle Network

Mar 2024 – Present

Full-Stack Developer / Core Protocol Engineer

tangle.tools

- Core developer of Blueprint SDK — decentralized services framework with P2P networking (libp2p), round-based MPC, threshold signatures (BLS, ECDSA), and trusted execution environments
- Built Blueprint Agent (ai.tangle.tools) — production AI platform with React, Cloudflare Workers, Supabase, LiteLLM, RAG pipelines, and Stripe billing
- Developer on the Tangle blockchain — Substrate-based network with EVM compatibility, zero-knowledge proofs, and multi-party computation
- Collaborated with EigenLayer’s team on their Rust SDK, initially porting it before co-developing their official version

Avarok Cybersecurity

Apr 2023 – Present

Lead Developer

[GitHub](https://github.com)

- Core contributor to the Citadel Protocol — post-quantum encryption with Kyber, NTRU, and a custom 3D matrix ratcheting algorithm over TCP, TLS, QUIC, UDP, and WebRTC
- Primary developer of the Citadel Agent — background daemon bridging client apps to the protocol SDK with NAT traversal and WASM targets
- Primary developer of Citadel Workspace — encrypted communication app for messaging, file-sharing, and team collaboration

T’sarE LLC

Mar 2022 – Apr 2023

Programming Lead

tsaremedia.com

- Led up to 20 programmers building Galaxy Gang in Unreal Engine 4/5 with C++ and Blueprints
- Built gameplay systems, networking layer, and CI/CD pipeline with Wwise audio integration

Varsity Tutors

Nov 2022 – Mar 2023

Programming Tutor

- Taught data structures, algorithms, and systems concepts — from Python basics through C++ internals

SIU Carbondale

2018 – 2022

IT Specialist & Student Worker

- Managed Active Directory environments, lab systems, and hardware infrastructure for the university

Projects

Blueprint SDK — [GitHub](https://github.com) · [Docs](#)

SDK for decentralized services across Tangle, EigenLayer, and EVM chains. P2P networking, threshold signatures, MPC, TEEs, and WASM runtimes.

Blueprint Agent — ai.tangle.tools

Production AI agent platform — React, Cloudflare Workers, Supabase, LiteLLM, RAG, Stripe.

Citadel Protocol — [GitHub](https://github.com)

Post-quantum secure networking in async Rust. Kyber, NTRU, custom ratcheting algorithm, transport across TCP/TLS/QUIC/UDP/WebRTC

Tangle Network — [GitHub](https://github.com) · tangle.tools

Substrate-based blockchain with EVM compatibility, ZK proofs, and multi-party computation.

Meikai — meikai.cards

MTG deck builder with AI-assisted analysis — deck building, collection management, and agent-powered recommendations.

Skills

Languages	Rust, C++, TypeScript, C, Python, JavaScript, Java, C#, Solidity, SQL, Verilog, MIPS Assembly
Security	Post-quantum encryption (Kyber, NTRU), AES-256-GCM, ChaCha20-Poly1305, threshold signatures (BLS, ECDSA), ZK proofs, MPC, penetration testing, reverse engineering
Systems	Async networking (Tokio), TCP/TLS/QUIC/UDP/WebRTC, libp2p, NAT traversal, WASM/WASIX
Blockchain	Substrate, EVM/Solidity, Polkadot, EigenLayer, MPC, consensus, TEEs (Firecracker)
Full-Stack	React, Vite, Node.js, Cloudflare Workers, Supabase, Drizzle ORM, LiteLLM, LangChain, RAG
Tools	Docker, Nix, AWS, Git, Linux, Wireshark, Burp Suite, Metasploit, Ghidra, IDA Pro, Foundry, Prometheus, Grafana
Spoken	English (native), Spanish (bilingual), Japanese (conversational)

Education

Southern Illinois University Carbondale

2018 – 2022

B.S. Computer Engineering · B.S. Electrical Engineering

Specialization: Cyber Systems & Security