



THE DECENTRALIZED INTELLIGENCE LAYER FOR HUMAN COMMUNICATION

Real-time sign language ↔ speech translation. No human interpreter.

Orchestrating six live Bittensor subnets into the first product to solve a federal legal mandate every healthcare facility in America is currently failing.

SEED ROUND · \$1M

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A GLOBAL BARRIER AT MASSIVE SCALE

Hearing loss is the world's largest unaddressed **accessibility** market.

430M**DISABLING HEARING LOSS**

Globally. 1.5B with any degree of hearing loss.
(WHO 2024)

48M+**AMERICANS AFFECTED**

Deaf or hard of hearing. Underserved across every touchpoint.

64.4%**MISS CRITICAL MEDICAL INFO**

Of deaf patients miss half or more of critical info in appointments. (Cambridge/PLOS One 2025)

0**BIDIRECTIONAL APPS AT SCALE**

No real-time, two-way sign-to-speech translation exists at scale today. Anywhere.

The result: fewer primary care visits, significantly more ER visits — and a healthcare system in systematic violation of federal law with no scalable solution in sight.

A NON-DISCRETIONARY MARKET WITH CAPTIVE BUYERS

Healthcare communication isn't a nice-to-have. **It's federal law.**

- **ADA Titles II & III + Section 1557** require every hospital, clinic, dental office, urgent care, mental health facility, hospice, dermatology practice, and medical spa to provide effective Deaf communication — at no cost to the patient.
- **No size exemption.** A solo dentist in a strip mall is as covered as a 500-bed hospital.
- **1.1M+ US facilities** legally required to comply. Entry point: 6,120 hospitals + 900,000+ physician offices.
- **May 2024:** HHS updated Section 504 with new digital accessibility standards. Enforcement deadlines 2026–2028.
- **59%** of addiction facilities and **41%** of mental health facilities provide zero ASL support today. Fully exposed, right now.

DOJ ENFORCEMENT — ALL SIGN-LANGUAGE SPECIFIC

CASE	AMOUNT	DATE
Washington Health Plan — 400 failures, 41 facilities	\$1M fund	Oct 2021
Polyclinic / Optum Care WA — deaf/blind patients denied	\$400K	Dec 2025
Spotsylvania Regional MC — 9 hospitalizations	\$121K	2017
AdventHealth-Gordon — labor & delivery, no interpreter	\$60K	2022
DOJ first-violation statutory fine	\$75K–\$115K	Current

The DOJ's Barrier-Free Health Care Initiative has been settling these cases for over a decade. Dec 2025 was the 4th medical settlement in 3 years. Enforcement is accelerating.

What these numbers are: Each row is a real DOJ settlement — the federal government investigated a healthcare facility for failing to provide sign language interpreters to deaf patients, and that facility paid to resolve the case. These are documented public consent decrees where named organizations wrote checks. The \$75K–\$115K line is the minimum civil penalty the DOJ can impose on a first violation even without a full lawsuit. The pattern is consistent: fail to provide ASL access, get investigated, get settled against.

THE HUMAN-IN-THE-LOOP SUPPLY COLLAPSE

You cannot hire your way out of a **structural crisis.**

COST BARRIER

\$50/hr

AVERAGE ASL INTERPRETER RATE

Billed with minimums. In-person medical interpreters run \$100–\$140/hr with a mandatory 3-hour minimum — \$300–\$420 per encounter. Carolinas Healthcare System: \$3.3M/yr on interpreters.

SUPPLY COLLAPSE

50:1

DEAF USERS PER INTERPRETER

Fewer than 14,000 certified ASL interpreters serve 48M Americans. 5–10 year certification pipeline. States project losing 40% of interpreters by 2030. National Deaf Center: declared national crisis.

AVAILABILITY GAP

24/7

EMERGENCIES DON'T SCHEDULE

On-demand access is structurally impossible. Human interpreters require 48–72hr advance notice. Emergencies happen at 3am. The only way to meet unplanned 24/7 demand is to remove the human from the loop entirely.

THE CURRENT STANDARD IS FUNDAMENTALLY BROKEN

VRI is Blockbuster. SignOra is Netflix.

What VRI Is Today

A tablet on wheels. Staff dials a call center. A human ASL interpreter joins by video from a remote location. Like FaceTime with a professional interpreter. Billed at \$1.95–\$3.49 per minute — still a human, still limited, still failing.

DIMENSION	VRI (BLOCKBUSTER)	SIGNORA (NETFLIX)
Technology	Tablet + remote human	Fully automated AI
Availability	Fails at 3am	24/7 instant
Connection time	3–10 min delay	Sub-3 seconds
Patient satisfaction	41% satisfied	Native 3D gesture
Community acceptance	93% oppose in healthcare	Designed for Deaf
Cost (mid hospital)	\$156K–\$432K/yr	\$8K–\$20K/yr

Sources: NIH PMC6431824 (satisfaction) · CT Public 2024 (community) · AMN Healthcare Aug 2025 (cost) · GLOBO Language Services (rates)

How Facilities Handle It Today

- **<5% of facilities** maintain full-time staff interpreters. One interpreter = one shift. No 24/7.
- **On-demand agency** — \$300–\$420 per visit, 48–72hr notice, fails for every emergency.
- **VRI** — still human, still limited, \$432K/yr total cost at one real facility (AMN Healthcare).
- **Family members** used as interpreter in 10–27% of encounters — explicitly prohibited by ADA.
- **Written notes / lip reading** — legally insufficient for complex communication per ADA.gov.
- **Nothing at all** — 59% addiction, 41% mental health facilities. Zero ASL support.

"VRI solved a problem with the technology available at the time. It is expensive, slow, requires a human, and is universally disliked by the community it serves."

INSTANT · AUTOMATED · BIDIRECTIONAL

SignOra turns any phone or tablet into a live **two-way** translator.

The camera reads sign language and speaks it aloud. Spoken replies become on-screen captions and a signing avatar. Designed to run in under three seconds — with no interpreter to schedule, no cart to wheel in, and no human pool to run dry.

<3s

TARGET END-TO-END LATENCY

Predictive translation begins before the sentence finishes.

300+

SIGN LANGUAGES

Via global competitive miners across the Bittensor network.

24/7

ON-DEMAND, NO SCHEDULING

Emergencies happen at 3am. SignOra is always on.

0

WEARABLES OR SENSORS

Works on any phone or tablet the facility already owns.

PATH A — DEAF → HEARING

- **Capture:** Camera films the Deaf user signing, no wearables or sensors required
- **Recognize:** Hand and body keypoints extracted frame-by-frame and decoded into language
- **Translate:** Predictive translation begins before the sentence finishes
- **Speak:** Natural synthesized speech plays aloud for the hearing person

PATH B — HEARING → DEAF

- **Listen:** Hearing person speaks; audio captured and transcribed automatically
- **Translate:** Words translated back into the Deaf user's sign language
- **Caption:** Live captions appear on screen as the conversation unfolds
- **Sign:** Signing avatar renders the reply visually, completing the loop

COMPOSING PROVEN INFRASTRUCTURE — NOT BUILDING FROM SCRATCH

Six live Bittensor subnets.

One enterprise product.

Every part of our pipeline already exists in production across the Bittensor ecosystem. SignOra is the routing intelligence that composes highly specialized, already-live subnets into a single real-time translator that has never existed at scale.

SN78**Vocence**

Lead dev partner. Speech synthesis, audio capture, orchestration build. Already operating at scale.

SN44**Score Vision**

Real-time hand skeleton keypoints extracted from live video at 30fps. Gesture recognition.

TEE**Targon / Chutes**

Intel TDX confidential compute. HIPAA-ready PHI-blind inference. Encrypted in use.

SN59**BabelBit**

Predictive multilingual routing. Sub-3-second translation begins before sentence finishes.

SN85**Vidaio**

AI video processing and delivery for the signing-avatar output back to the deaf user.

STO**Hippius**

Encrypted blockchain storage. Consented gesture pairs. Continuous learning loop. Medical-grade.

We are composing proven infrastructure, not inventing it. Every consented conversation improves the model — a compounding moat centralized competitors training on fixed quarterly datasets cannot replicate.

WHY BIG TECH STRUCTURALLY LOSES THIS MARKET

A massive tech incumbent cannot copy this without **breaking HIPAA or losing money.**

Dimension	SignOra (Bittensor)	Google / Microsoft
MODEL IMPROVEMENT	Self-trains continuously from live, consented usage via Hippus	Static models. Expensive, manual quarterly retraining.
LANGUAGE COVERAGE	Scaling to 300+ sign languages via global competitive miners	Restricted to handful of highly profitable major languages.
DATA PRIVACY (HIPAA)	Intel TDX TEE — hardware-encrypted, PHI-blind. Inherited from Bittensor, not bolted on.	Opaque centralized cloud. Generic APIs unsuited for PHI.
COST STRUCTURE	Decentralized competitive miner pricing → compute baseline	High-margin centralized cloud architecture.
NETWORK ECONOMICS	dTAO value accrues directly to token holders and network participants	Zero network ownership for early adopters or data contributors.

Three Compounding Moat Layers

LAYER 1 — LEGAL MANDATE

Non-discretionary, non-cutable demand. Hospitals must solve this. The DOJ is actively enforcing. This is not a product feature decision — it is a legal compliance obligation.

LAYER 2 — DATA FLYWHEEL

Every consented conversation trains the model. A continuous-learning network spanning 300+ languages that competitors on fixed datasets are structurally unable to replicate.

LAYER 3 — HIPAA-NATIVE PRIVACY

Cryptographic blindness inherited from the Bittensor stack, not retrofitted. Compliance scales with the network rather than becoming technical debt.

DISRUPTING A \$10B LEGACY COST CENTER

1.1 million captive facilities. No size exemptions.

TAM — TOTAL ADDRESSABLE

\$4.5B+

By 2033 · 15.4% CAGR

Global sign language translator market. Consumer, enterprise, and healthcare verticals. The broader interpretation market SignOra disrupts is currently valued at \$10B.

SAM — SERVICEABLE

\$500M–\$1.2B

Years 1–3

English-first markets (US, UK, Australia) plus the immediate ADA healthcare compliance channel. Expanding into EU and Asia-Pacific in Phase 3.

SOM — OBTAINABLE

\$10M–\$20M

Years 1–3

3–5% capture of SAM. 500–2,000 healthcare contracts at \$10K–\$60K/yr plus early consumer subscriptions at \$4.99–\$19.99/mo.

6,120+

HOSPITALS

900K+

PHYSICIAN OFFICES

200K+

DENTAL PRACTICES

31K+

MENTAL HEALTH & ADDICTION

14,097

URGENT CARE CENTERS

10,488

MEDICAL SPAS

WE ARE CAPTURING A MANDATED BUDGET CURRENTLY BEING WASTED

Not adding a budget line. Replacing one that doesn't work.

FACILITY TYPE	CURRENT ANNUAL COST	SIGNORA PRICE	MULTIPLE
Solo clinic / dental / derm	\$12K–\$31K	\$2K–\$6K	2–15x
Urgent care (walk-in)	\$19K+ VRI only	\$2K–\$6K	3–10x
Mental health (non-compliant)	\$0 + \$75K fine risk	\$2K–\$8K	37x ROI
Mid-size hospital	\$156K–\$432K	\$8K–\$20K	8–54x
Large hospital system	\$500K–\$3.3M+	\$40K–\$60K	10–55x

Sources: AMN Healthcare Aug 2025 · HFMA 2022 (Carolinas Healthcare \$3.3M) · Interpreters Unlimited · GLOBO Language Services

THE \$432,322 NUMBER

Real AMN Healthcare Client — One Facility, One Year

\$169,967 in direct VRI fees + \$262,355 in nursing productivity loss (5,457 hours of experienced RNs waiting for VRI connections). This is what the status quo actually costs — before any DOJ liability.

THE \$3.3M BENCHMARK

Carolinas Healthcare System — Contract Interpreters

\$3.3M/yr on contract interpreters across their network. After deploying VRI: still spending \$1.8M/yr. SignOra Enterprise tier: \$40K–\$60K. That's a 10–55x reduction for a relationship of that scale.

"We cost less than two weeks of a single human interpreter, work 24/7, and the alternative is a fine that starts at \$75,000."

ALWAYS CHEAPER THAN CURRENT SPEND. ALWAYS CHEAPER THAN ONE DOJ FINE.

Three tiers. One rule: SignOra always wins the math.

TIER 1 · CLINIC \$2K–\$6K_{/yr} Solo · Dental · Derm · Med spa · Urgent care · Small MH 3 devices · 24/7 · Unlimited translations · ASL Standard BAA (HIPAA) · see note below Self-serve onboarding · Email support ADA compliance certificate of use	TIER 2 · HOSPITAL \$8K–\$20K_{/yr} 50–500 bed hospitals · Multi-dept · Regional health centers 25 devices · 300+ sign languages Enhanced BAA · Joint Commission reporting Analytics dashboard · Priority 8hr support Saves \$136K–\$412K/yr vs current spend	TIER 3 · ENTERPRISE \$40K–\$60K_{/yr} 500+ bed systems · IDNs · National chains · Multi-site Unlimited devices · Epic/Cerner/Athena EHR Custom BAA + HIPAA attestation · Enterprise analytics Dedicated AM · 2hr SLA · 99.9% uptime Carolinas \$3.3M/yr → <2% of that · 10–55x
BAA EXPLAINED BAA = Business Associate Agreement — federally required HIPAA contract before hospital deployment. All tiers included. Cost to us: negligible — drafted once by counsel, zero per-customer cost. Our TEE = cryptographically blind to patient data. (GA = General Availability. HIPAA attestation ~\$15–50K one-time, on roadmap.)	ROI — SMALL FACILITIES One DOJ fine (\$75K+) = 12–37 years of Tier 1. Agency visit at \$300 minimum exceeds full annual cost after 7–20 visits. Cheapest exit from active federal liability.	ROI — LARGE SYSTEMS Carolinas: \$3.3M/yr. Enterprise = <2% of that. Mid hospitals on VRI: \$156K–\$432K/yr. Tier 2 saves \$136K–\$412K. Every tier pays for itself before month two.

THREE PHASES · FOUR REVENUE STREAMS · ONE COMPOUNDING FLYWHEEL

Healthcare is the wedge. The universe is \$10B+.

PHASE 1 · MONTHS 1–12

Healthcare B2B

Target ADA compliance officers at mid-size hospital networks.
Value: legal compliance + massive cost reduction. Goal: 50–200 institutional contracts.

\$10K–\$60K/yr per network

PHASE 2 · MONTHS 6–18

Consumer & Education

Mobile app for Deaf individuals, families, and university disability services. Freemium model with premium tiers. Goal: 100K+ app users.

\$4.99–\$19.99/month per premium user

PHASE 3 · YEARS 2–3

Platform & Enterprise

API/SDK licensing into telehealth, legal, video conferencing, and government. Embedded accessibility layer across major platforms.

Per-call pricing + API licensing

B2B SAAS

\$10K–\$60K

Per institutional network / year

CONSUMER SUBS

\$4.99–\$19.99

Per premium user / month

API LICENSING

Per-Call

For telehealth platform integrations

NETWORK ACCRUAL

18%

Subnet emissions via Bittensor protocol

FOUNDER-LED · PARTNER-BUILT · CAPITAL-EFFICIENT BY DESIGN

The right person, in the right ecosystem, at the right moment.

MICHAEL J. PARKER — FOUNDER & CEO

Capital Allocator · Operator · Ecosystem Native

- 25+ years Southern California real estate appraisal & brokerage — **pricing the gap between what something is worth and what the market thinks**
- Founder of **THESIS** — private investment network guiding members through asymmetric opportunities
- Author of ***The Asymmetric Mind*** — capital allocation framework in the AI era with a cult following in private communities
- Active **Bittensor miner and subnet investor** with direct ecosystem relationships — the ones that brought Vocence in as a warm alliance, not a cold introduction
- Advanced background in **radiation physics**; career as a **radiology contractor inside Southern California hospital systems** — watched the deaf-communication gap go unsolved on the clinical floor firsthand

VOCENCE (SN78) — LEAD DEVELOPMENT PARTNER

specialK & Team · Production Voice Intelligence Network

Vocence is SignOra's primary development team and core infrastructure builder. A live, production Bittensor subnet, already operating at scale. Their engineers lead the orchestration build; their voice-intelligence network powers speech on both sides of the conversation. Milestone-vested equity partnership.

THE BUILD MODEL

Partner-Built = Capital-Efficient by Design

Rather than carrying a large salaried team pre-revenue, SignOra executes through established partners already shipping in production. Capital goes into building and growth — not pre-revenue headcount. Michael owns: BD, sales, partnerships, vision, fundraising. Vocence owns: engineering, infrastructure, orchestration.

\$1M SEED ROUND · PRE-BUILD · ARCHITECTURE VALIDATED · PARTNERS SECURED

Four uses. One gating step. Every dollar compounds.

USE OF FUNDS #1 — PRIMARY

\$400K–\$450K

Subnet Slot Acquisition

~1,500 TAO locked — not spent. Recoverable on deregistration. Produces daily emissions while active. Yield-bearing balance sheet asset. The single gating step that makes SignOra a live, emitting network with a token.

USE OF FUNDS #2

\$240K–\$280K

Production Build & Engineering

Vocence-led orchestration build, mobile frontend, signing-avatar integration, and the text-to-sign model — the one remaining piece to complete the full two-way loop.

USE OF FUNDS #3

\$180K–\$220K

Sales & Marketing

Dedicated budget to capture early healthcare demand fast, build the pipeline, and get SignOra in front of hospital decision-makers across the mandated market.

USE OF FUNDS #4

\$100K–\$140K

Compliance & Operating Runway

ADA / Section 504 compliance posture, BAA and HIPAA attestation roadmap, and operating runway to ship the first pilots and reach market quickly.

CRYPTO-NATIVE FUNDS

Lead Instrument	Token warrant for alpha + small equity
Weighting	~70% token / 30% equity
Thesis	Network upside + dTAO flywheel
Vesting	18–24 months, conviction-locked
Extras	Validator rights + pro-rata

TRADITIONAL / HEALTHCARE VCS

Lead Instrument	Preferred equity (priced or SAFE)
Token	Optional warrant — ignore if needed
Token upside	Flows to C-corp as balance-sheet asset
Rights	Liq. pref · pro-rata · board/observer
Founder Vesting	4-year vest · 1-year cliff

HEALTHCARE SIGN LANGUAGE IS THE WEDGE, NOT THE CEILING.

Sign language is where we start. Universal human motion to meaning is where we are headed.

At its core, SignOra is a gesture visualization engine — a polylingual system that watches human motion and decodes its meaning in real time. The same architecture that bridges ASL and English extends to any language, any modality, and ultimately the predictive reading of all human expression.

A MANDATED MARKET

Non-discretionary demand across 1.1M+ US facilities. The DOJ is actively enforcing today.

AN ARCHITECTURAL MOAT

Six live subnets. Continuous-learning flywheel. HIPAA-native privacy. Partners already shipping.

CAPITAL-EFFICIENT

Partner-built. This round funds the build and slot, not a from-scratch buildout or bloated team.



UNIVERSAL MOTION. UNIVERSAL MEANING.