AVIRAN VARGAS

Crypto Hosting, Engineering & Operations Leader
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PROFESSIONAL SUMMARY

Operations and data-center leader with 15+ years of experience designing, building, and running mission-critical infrastructure across traditional, enterprise data centers and large-scale bitcoin mining facilities. Currently directing 60+ MW of cryptocurrency mining capacity across U.S. sites, with hands-on responsibility for site selection, electrical and layout design, SOPs, vendor management, and 24/7 operations. Day-to-day ownership of live ASIC fleets (Bitmain Antminer and MicroBT Whatsminer platforms), pool and hashrate management, BTC profitability modeling against price and hash price, firmware tuning, and ASIC procurement and end-of-life decommissioning, sustaining 95%+ hashing uptime at scale. Retained six times as an expert witness on ASIC equipment operation & valuation, mining-site operations, and contracts/MSA's between operators and their customers, damage models and rebuttals.

PROFESSIONAL EXPERIENCE

EZ Blockchain *Chicago, IL*
Director of Operations & Infrastructure *September 2025 – Present*

- **Leadership:** Direct strategic operations across multiple bitcoin mining data centers; scaled cryptocurrency mining capacity to 60+ MW while sustaining 95%+ hashing uptime and reducing operational costs by up to 7%.
- **Crypto Operations:** Manage live ASIC fleets across U.S. sites (Bitmain Antminer and MicroBT Whatsminer platforms); oversee pool selection and hashrate monitoring, BTC profitability modeling, ASIC procurement, firmware tuning, and end-of-life decommissioning.
- **Management:** Own workforce planning, vendor contracts with ISPs, ASIC manufacturers, and energy providers, financial and operational reporting, and SOC II Type 2-compliant cybersecurity frameworks.
- **Experience:** Deploy automated monitoring stacks (DCIM, Foreman, OptiFleet), optimize cooling and airflow at scale, and lead Smartbox deployments and facility expansions.

Operations Manager — Operations & Site Reliability *October 2021 – September 2025*

- **Leadership:** Built the bitcoin mining operations function from the ground up; authored the company's BTC mining operations manual covering site operations, reliability, and severe-weather response.
- **Crypto Operations:** 24/7 monitoring of live ASIC fleets, pool/hashrate performance, and BTC payouts; benchmarked profitability against BTC price and hash price and drove fleet-level firmware and configuration improvements.
- **Management:** Owned daily hosting-site operations, RMA and logistics, vendor relationships, hiring and training, and customer-facing reporting and audits.
- **Experience:** Layer-1 networking, airflow and cooling studies, monitoring automation, and daily/weekly/monthly reporting on power, hashing, and profitability.

Comcast *Northlake, IL*
Lead Engineer (Supervisor Role), Data Center Infrastructure Services *June 2011 – October 2021*

- Ran day-to-day operations of Comcast's largest national data center (21,000+ production servers) for a decade, leading a team of 13 engineers on a 24/7/365 basis and consistently meeting enterprise SLA, uptime, and compliance targets.

Chicago Mercantile Exchange *Chicago / Naperville, IL*
Data Center Infrastructure Engineer *January 2010 – June 2011*

- Day-to-day operations of a Tier IV financial-exchange data center across PROD, DR, and other environments; deployed servers, switches, routers, and SAN storage and certified copper/fiber connections with Fluke DTX in a zero-downtime trading environment.

Kiddie Kandids Portrait Studios *IL, IN, MO, WI*
Central Lead, IT Area Supervisor *2005 – January 2010*

- Owned IT for 12+ studios across four states: hardware/software triage, vendor RMA (Dell, Apple, Photogenic), PC and Mac installs, remote support (Timbuktu, VNC), and training; traveled ~30% for routine maintenance and emergency break/fix.

Cathedral Computer Consultants *Chicago, IL*
Owner / Manager *2000 – 2005*

- Owned and ran a computer repair business: managed employees, inventory, and white-box system builds; performed hardware repair (Apple, laptops, consoles), Cat 3/5/6 cabling, and on-site client service.

EXPERT WITNESS ENGAGEMENTS

Retained six times as an expert witness in matters involving bitcoin mining operations, infrastructure, ASIC equipment, and the contractual relationship between mining operators and their customers.

United States v. Kovar – Retained by Federal PD *2026 In Progress*
District Court, D. Nevada

- Retained to opine on background information regarding cryptocurrency, blockchain technology, and cryptocurrency mining as well as explain to a federal jury crypto & blockchain technology.

[Confidential] *2026 In Progress*
American Arbitration Association (AAA) - Expert Witness

- Retained to opine on the standard of care for bitcoin mining site operators, the cause of ASIC hardware failures following two winter-storm events at NE hosting sites, and defects in the claimant's damages model. Testified claimant manufactured ASIC's faulty conditions.

[Confidential] *2026 In Progress*
American Arbitration Association (AAA) - Expert Witness

- Retained to opine on the effectiveness of day-to-day mining operations and whether the parties to the dispute followed proper operational procedures.

[Confidential] *2026*
American Arbitration Association (AAA) - Expert Witness

- Testified to the value of ASIC equipment and to general contract expectations and operational practices in the bitcoin mining industry.

Crypto Infiniti v. EZ Blockchain *2025*
United States District Court (Federal Litigation) - Expert Witness for Defense

- Testified on operational practices in bitcoin mining and on the use of unstable ASIC equipment at the root of the dispute; jury returned a complete defense verdict in favor of EZ Blockchain on a $15M claim.

[Confidential] *2024 - 2025*
American Arbitration Association (AAA) - Expert Witness

- Testified on the design and functionality of mining containers ("pods") and on the operational practices that contributed to the plaintiff's unsuccessful operations.

LANGUAGES & CERTIFICATIONS & PUBLICATIONS

Languages: English (fluent), Spanish (fluent)

Certifications: Microsoft Office Specialist - Excel 2019 Expert, BICSI/CI&M Data Center Expert certifications (completed 2017–2018), Blockchain Fundamentals (2026)

Publications: Currently authoring The 7 Layers of Crypto, the authoritative paper defining each layer of the crypto stack and the roadmap that connects them