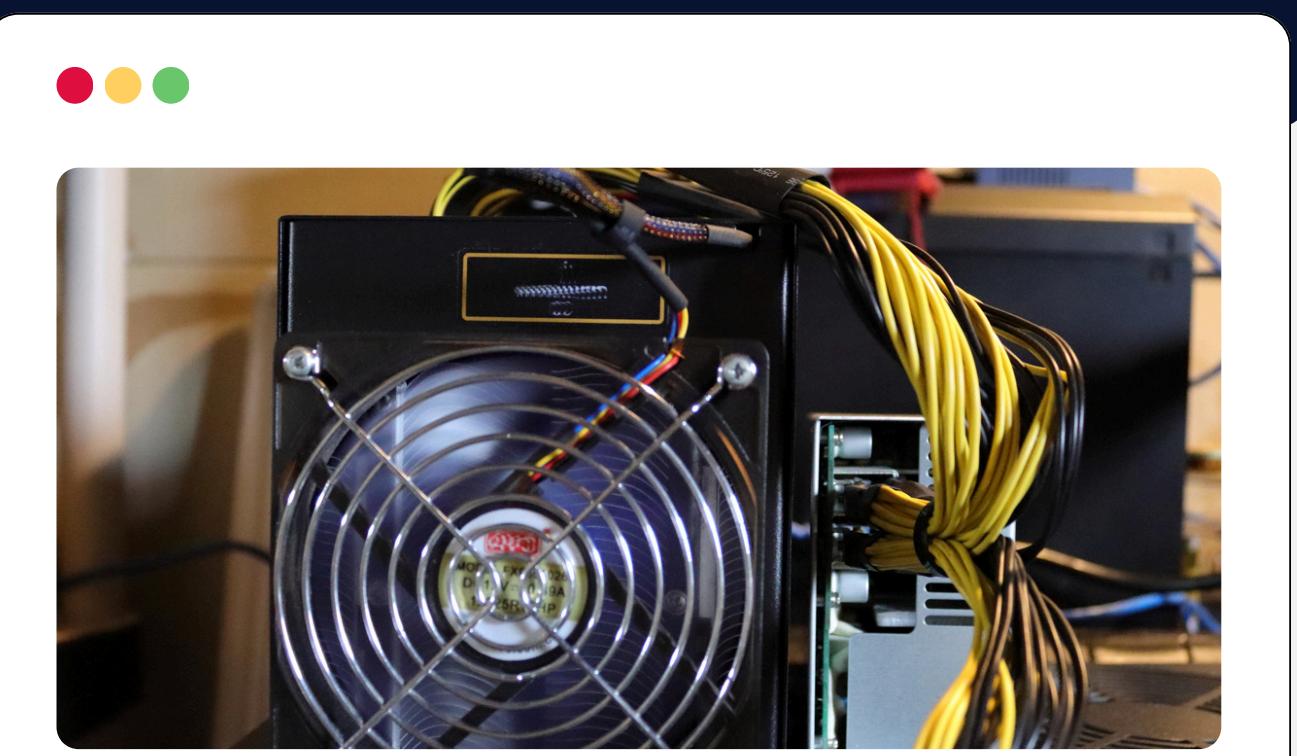




# Sovereign Bitcoiner Workshop





codeorange.dev  
codeorangedevs

# /Code\_Orange

## dev school



### BITCOIN WORKSHOPS

- Hands-on training in nodes, multisig, mining & privacy
- Every 4<sup>th</sup> Friday of the month 5pm at the Bitcoin House Bali



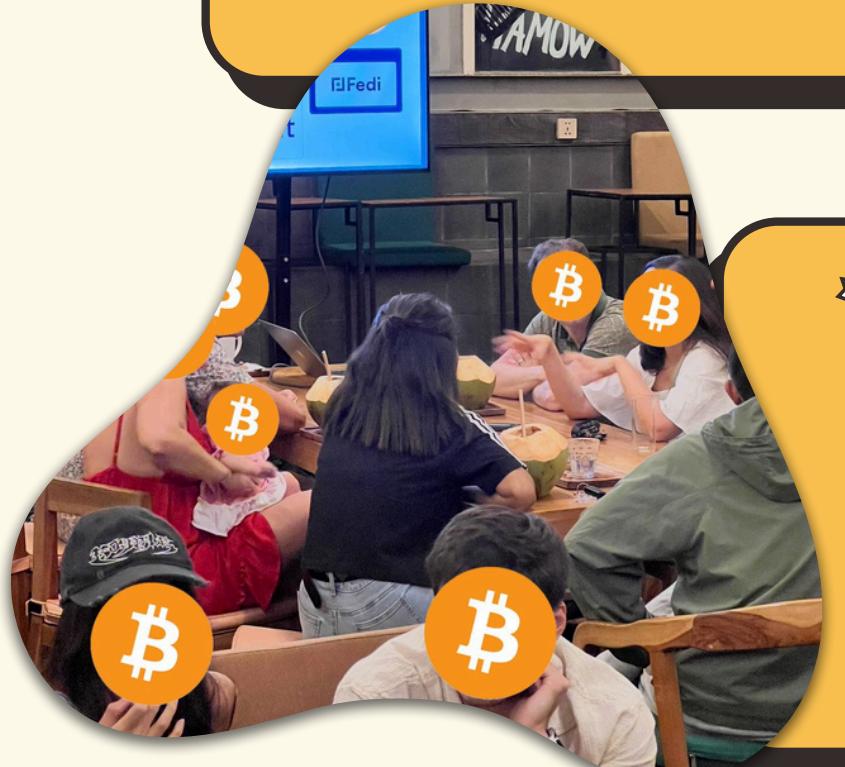
### STUDY COHORTS

- "Decoding Bitcoin" 10 week study cohorts on Discord
- Entry level bitcoin developer training



### VIBE CODING ON NOSTR

- Build censorship-resistant apps on the p2p internet
- Every 3<sup>rd</sup> Wednesday of the month



### TRAIN THE TRAINER

- Train bitcoiners to host their own workshops
- Earn sats while teaching your community

### READING CLUB

- Learn bitcoin culture and cypherpunk ethos
- Every 4<sup>th</sup> Wednesday of the month



Soapbox

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Vibe Coding on Nostr

MKStack

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Bitcoin  
Reading  
Club

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school

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cypherpunk's Manifesto {
  Ric Hughes ();
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Every 4th Wednesday of the month
WITA (UTC+8)
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Join us on Discord



# Self-Custody and Full-Nodes



## Self-Custody

- 12 words seed phrase
- Safety practices
- \$5 wrench attack mitigation
- Decoy wallets
- Multisig



## Full-Nodes

- Why run a node?
- How to run a node?
- Knots vs Core
- DIY
- Umbrel Home



# Bitcoin Mining and Privacy



## Mining

- BitAxe
- NerdAxe
- ASIC
- Energy
- Bitcoin is Bakery



## Privacy

- Fedi
- Cypherpunks
- Private payments
- Coinjoin
- Lighting Network
- eCash



# Socratic Seminar



Questions from the audience

What would you like to learn?

## Goals

- learn something new
- become a better bitcoiner
- have a clear call to action





# Self-Custody



- 12 word seed phrase backup
- Safety practices
- \$5 wrench attack mitigation
- Decoy wallets
- Multi-sig
- KYC free

1. AVOID
2. DONOR
3. CARD
4. WEALTH
5. IDLE
6. WRITE
7. SAUSAGE
8. PICNIC
9. MISS
10. BROOM
11. DOMAIN
12. BACHELOR

# What is a \$5 Wrench Attack?



- Physical coercion to steal your Bitcoin
- Bitcoin's security is unbreakable, but humans are the weak link.



Location	Date	Method	Amount
Bali, Indonesia	Mar 2023	Home invasion, wrench	~\$284 K BTC
Pune, India	Feb 2022	Kidnapping, ransom demand	~\$36.6 M USD
Hong Kong	Jun 2021	Eye-spray mugging	~\$255 K HKD
Phuket, Thailand	Jan/Feb 2024	Abduction in van	~\$900 K USD
Bangkok, Thailand	Jul 2024	Tied-up assault	Unspecified

# How to Defend Against It?



## Decoy Wallets:

- Keep a wallet with a smaller amount to “give-up”
- Hand over the decoy wallet funds if coerced, protect your main stack.

## Multi-Signature (Multi-Sig):

- Requires multiple keys (e.g., 2-of-3) to spend Bitcoin.
- Store keys in separate locations (e.g., home, vault).



## Operational Security (OpSec):

- Never reveal the amount of Bitcoin you hold
- Keep Bitcoin and real identity separate
- Don't store seed phrases on phones or computers—ever, Tor



# Build a Multisig Wallet



## Task:

Create a 2-of-3 multisig wallet with a decoy wallet using Nunchuk.

## Steps:

- Generate 3 keys.
- Set up a decoy wallet with a small balance.
- Sign a test transaction with 2 keys.





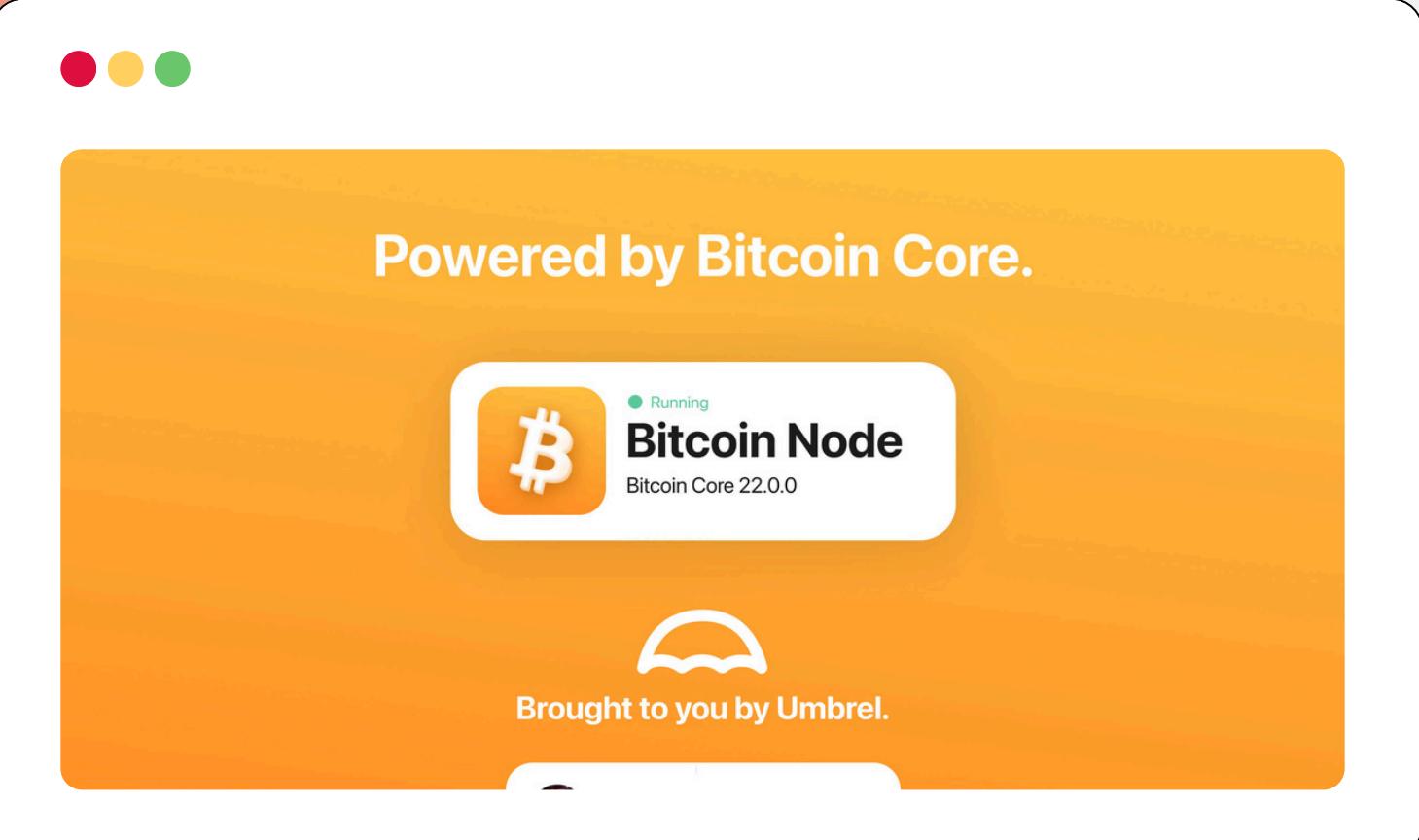
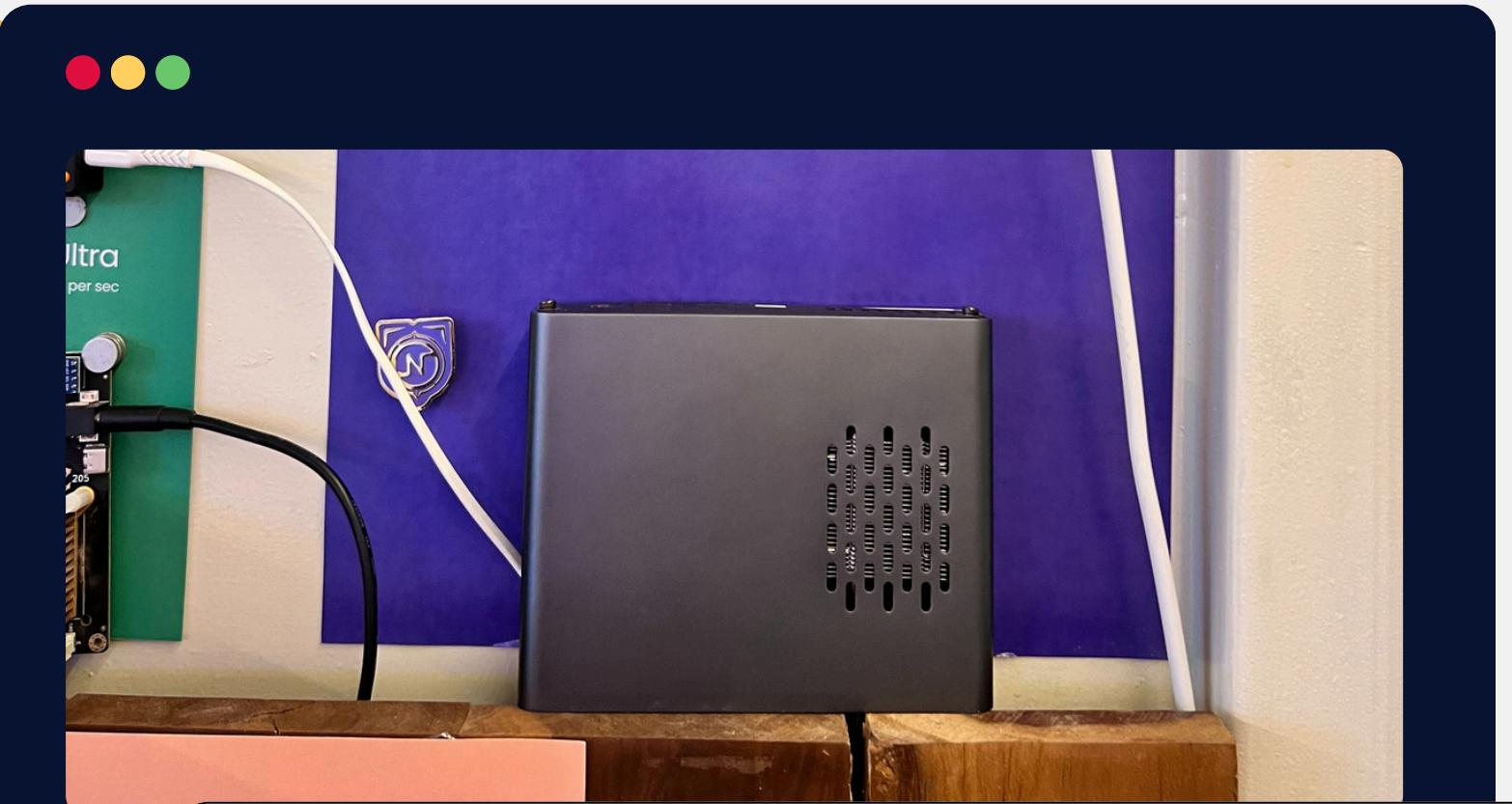
# How to Run a Bitcoin Node



# What is a Bitcoin Node?



- A Bitcoin node is a computer running Bitcoin software (Core or Knots)
- Stores and validates the entire timechain.
- Enforce Bitcoin's rules
- Propagate data to other nodes
- Maintain a complete copy of the timechain
- Full nodes vs. pruned nodes



# Why Run a Full Bitcoin Node?

- **Privacy:** Verify transactions yourself, avoiding reliance on third-party services.
- **Security:** Ensure your transactions follow Bitcoin's rules.
- **Network Support:** Strengthen Bitcoin's decentralization by adding resilience.
- **Sovereignty:** Take control and "be your own bank."
- **Advanced features:** Lightning Network



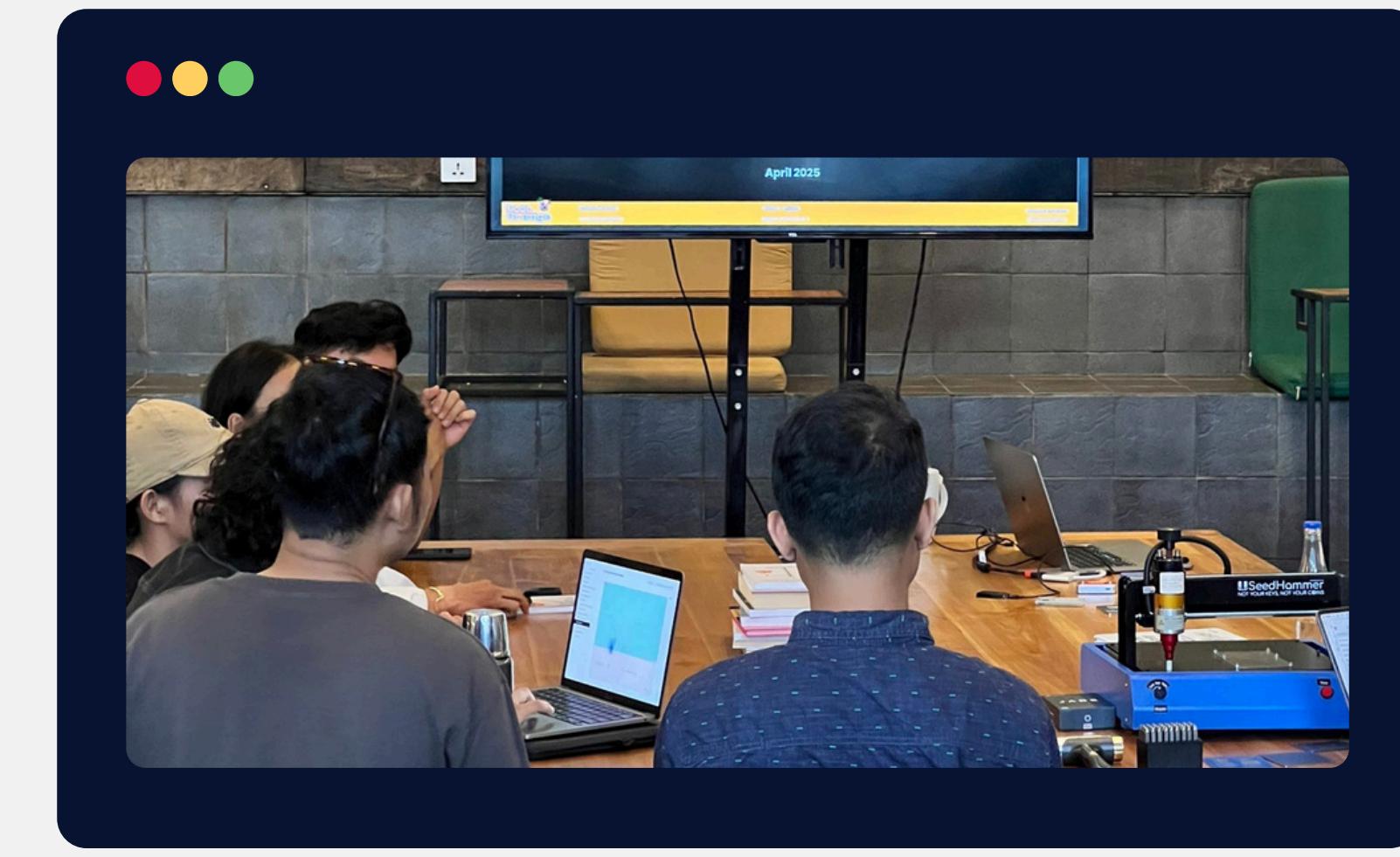
"If you had an energy-backed protocol,  
**decentralized and secure...** prices would fall  
forever"

- Jeff Booth



# Benefits of Running a Full Node

- **Transaction Verification:** Independently confirm your Bitcoin balances and transactions.
- **Decentralization and security:** More nodes make Bitcoin harder to censor or attack.



- **Learning Opportunity:** Gain hands-on understanding of how Bitcoin works.
- **Lightning Network Access:** Run a Lightning node for private, fast, low-cost transactions

# Introduction to Umbrel



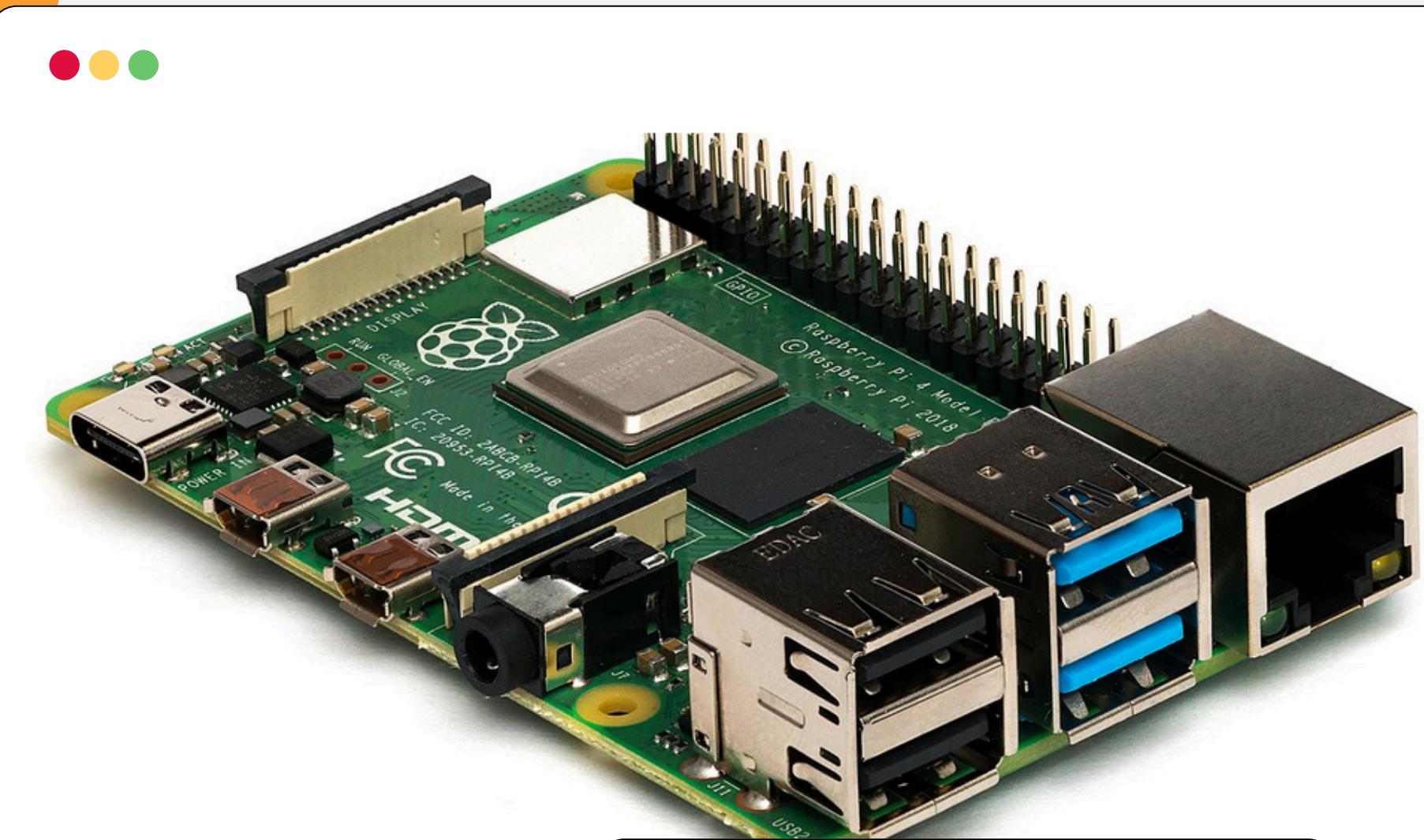
- **Umbrel** is a user-friendly operating system for running a Bitcoin node.
- Runs on **Raspberry Pi**, Linux, or pre-built Umbrel Home devices.
- Suitable for **beginners**: plug-and-play with minimal setup.

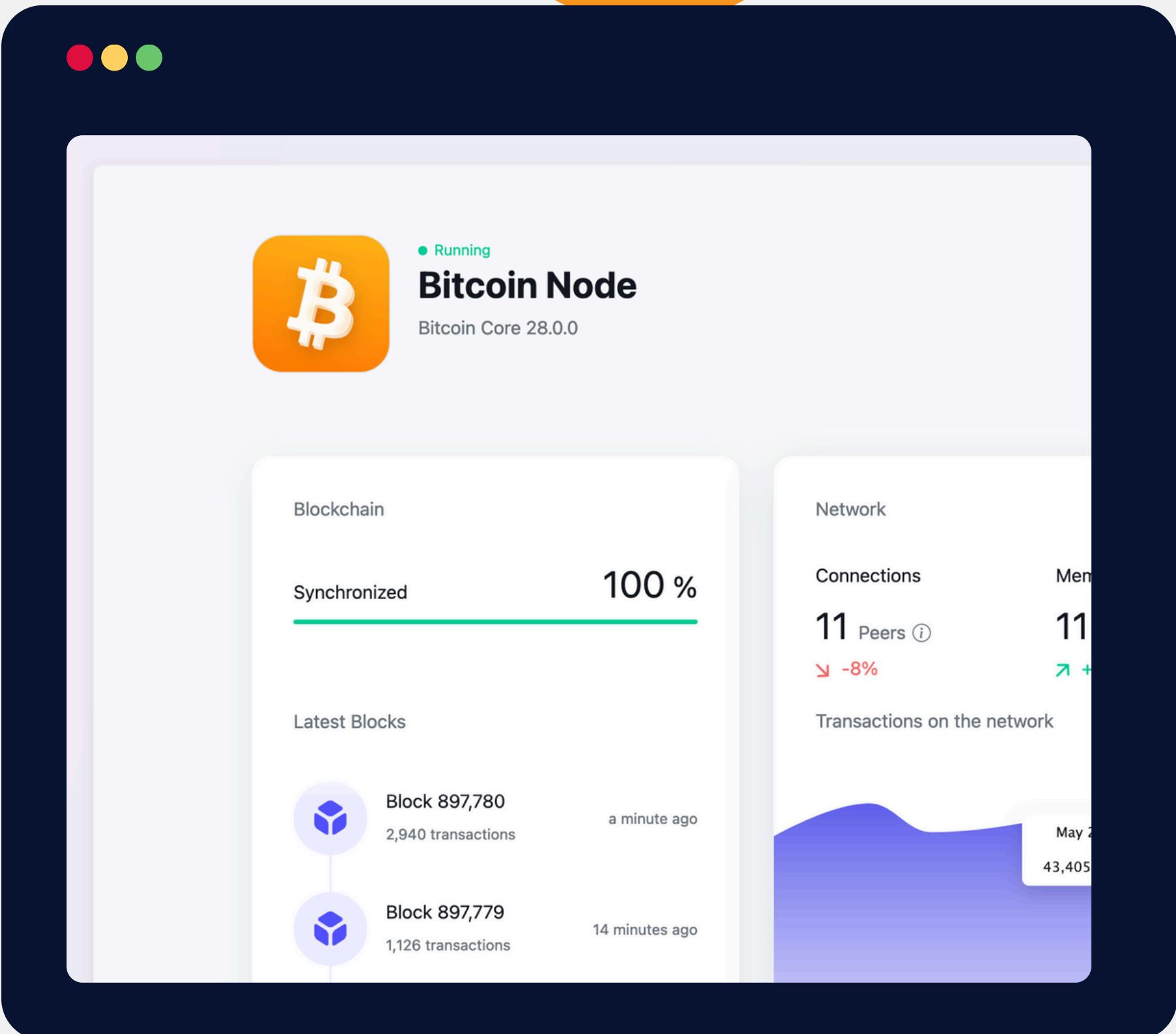


# Hardware requirements

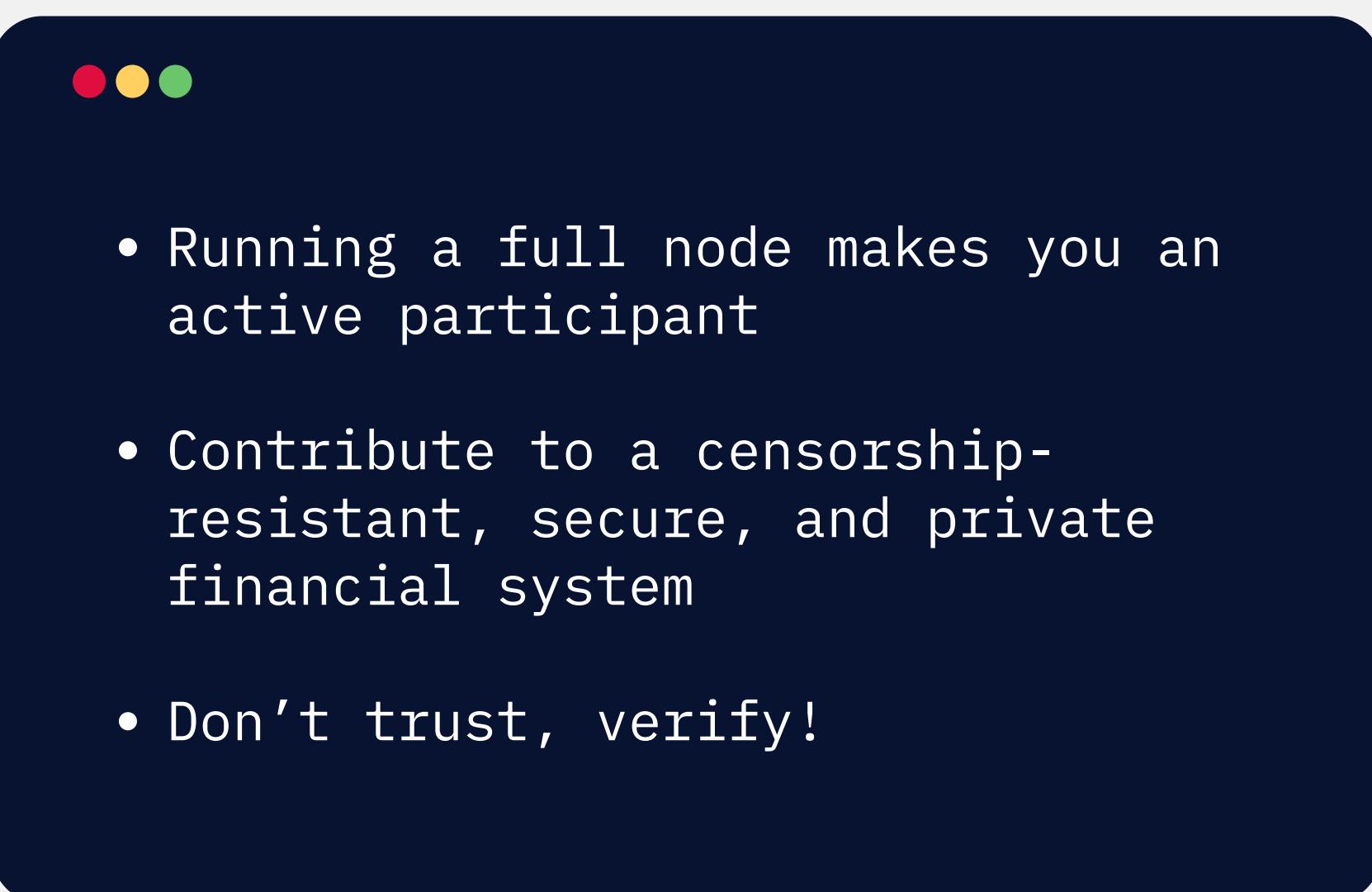


- **Raspberry Pi** 4 or 5 (8GB)
- **Storage:** 2TB SSD
- **MicroSD Card:** 16GB+ for Umbrel OS.
- **Accessories:** cables USB-to-SATA cable, Ethernet cable, power supply.
- **Cost:** ~\$200-\$300 for DIY setup.





# Run a Node Hold Your Keys



# Let's start a workshop!



Slides on GitHub  
Eventbrite, Meetup.com, Luma  
Code Orange Social Media  
Location  
Same time, same place

