

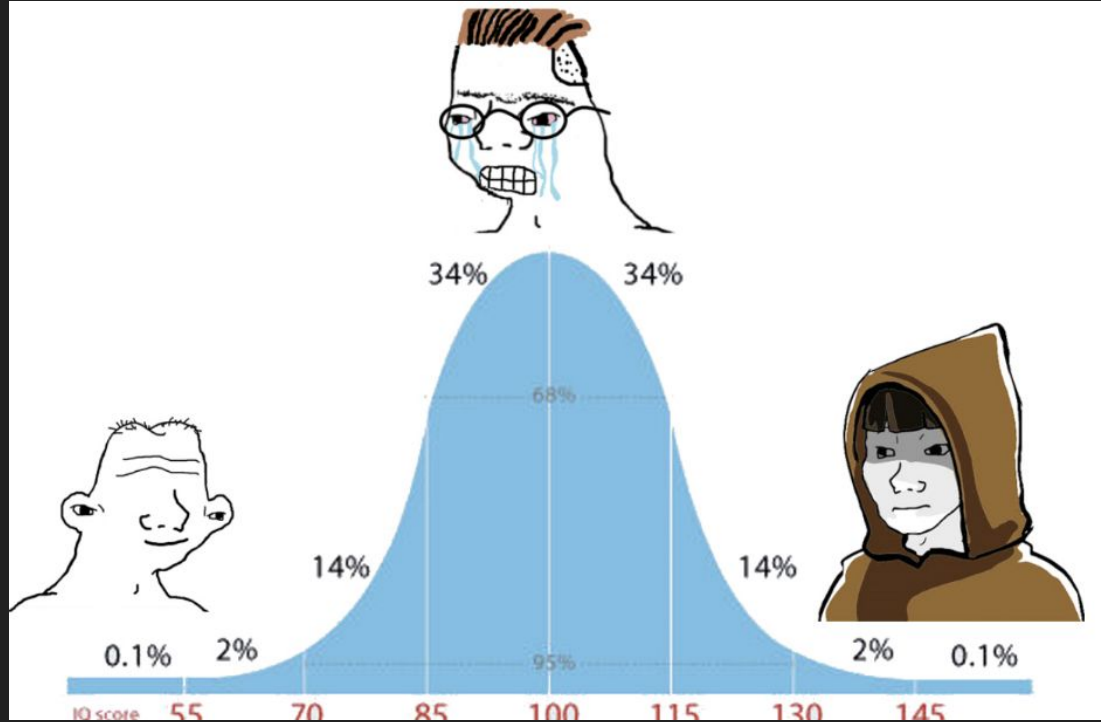
Backend engineer in Web3

Background

Get into crypto around 2021



Mid curve (as an engineer)



- From Blocto Backend / Growth Squad

- What is Blocto?
 - Multi-chain smart contract wallet provider
 - AA wallet (EIP-4337)
 - Easy onboarding (web2 experience)
 - Custodial vs Non-custodial mode

Backend engineer in Web2

- Backend Roadmap
 - <https://roadmap.sh/backend>

What are Web2 backend doing?

- System design
 - API
 - REST, GraphQL, gRPC
 - Database
 - RDBMS, NoSQL
 - Protocols
 - HTTP, WebSocket
 - Authentication
 - OAuth, JWT, Token Auth
 - Handle high concurrency / heavy traffic
 - DevOps
 - Docker, k8s

What are Web3 backend doing?

- Probably similar to Web2 backend engineers
- More “~~distributed~~” “decentralized” architecture
 - Imaging blockchain as a costly public time-series database
 - Blockchain covers part of backend functions
- Why use this “database”?
 - Programmable, Transparency, Immutable
 - TRUSTLESS

But there is some web3 domains knowledges...

- Fundamental
 - Blockchain = Cryptography + Distributed system + VM
- Ecosystem
 - wallet (EOA, MPC, SCW), bridge, DEX, oracle
- Bitcoin
 - POW, lightening network, inscription
- EVM
 - POS, side chain, L2 (Optimistic rollup, ZK rollup), MEV, EIP-XXX
- Non-EVM
 - Solana, Cosmos, Aptos, Sui, Aleo
- Smart contract
 - gas, security
- ZK
 - Circuit, zkEVM, STARK, SNARK

DO I HAVE TO KNOW ALL THAT SHIT???

- Not really ...
 - If you work for an CEX and the team in charge of KYC

- But
 - If you work in a small / medium company, it's obligated to learn it IMO

Seems like a similar situation for client side engineers

- Info from Binance iOS engineer & Crypto.com Android engineer
 - hardly know blockchain knowledge
 - only interact to API

- Compare to Startup devs
 - contract + frontend (or fullstack)

UX is still the pain point for crypto mass adoption

- Automation
 - Relayer (Blocto, Biconomy, Gelato)
- Swap experience
 - Aggregator (1inch)
 - Intent solver/sercher (Cow swap)
- Security
 - Monitoring (PeckShield)
- Analysis
 - Query & visualization (Dune)
- Shorter application latency
 - Indexer (The Graph)

About career...

- There is always frontend/backend demand existed
 - apply for web2 company easily
 - but the domain knowledge may not help a lot
- Hard to find best tech solution and always changing
- Might get token instead of RSU

RSU



Offer Letter

RSU



Vesting Day

Token vs RSU

- Token
 - Better liquidity (if not locked)
 - More Volatility
 - Different Tax policy
 - Had better to understand the tokenomic

- RSU
 - Listed or not listed
 - There is no liquidity for not listed options or stock basically

There is lots of distraction in this industry



Hope we can support each other on the journey of web3,
regardless of bull or bear markets.