

Proposal

This proposal is to initiate collaboration between Aave and IoTeX. To power our vision for [MachineFi](#), IoTeX has built unique infrastructure to bring verifiable data from machines, such as [Pebble Tracker](#), to blockchain Dapps. Real world data opens up a brand new design space for Web3 where users can earn digital assets/reputation based on their physical activities – parametric insurance, tokenization of machines, IFTTT based on “[proof of anything](#)” (just to name a few). We would love to work with [Newt](#) to craft PoCs and explore this intersection of MachineFi x DeFi with the Aave community.

With >\$300M TVL, IoTeX also has one of the fastest growing DeFi ecosystems today, and we hope to provide grants to bring Aave V3 to IoTeX. The rest of this proposal explains IoTeX in more detail, as well as areas of exploration at the intersection of DeFi x MachineFi.

Raullen Chai, Co-founder at IoTeX is submitting this proposal on behalf of IoTeX.

What is IoTeX?

Founded in 2017, IoTeX is an EVM-compatible Layer 1 blockchain that powers an ever-growing [ecosystem](#) of DeFi, GameFi, NFT, and MachineFi applications. IoTeX is headquartered in Silicon Valley and is backed by a [global team](#) of 50+ top tier engineers, research scientists, and operators from Google, Facebook, Uber, Bosch, and more. IoTeX also leads several industry/research bodies including the [IEEE](#), [IIC](#), [MOBI](#), and [CCC](#). Explore our [open-source code](#) on Github.

As of March 2022, the IoTeX ecosystem consists of 100k+ users, 10,000+ [devices](#) registered, 150+ [projects/partners](#), and \$300M+ TVL (including staked IOTX). IoTeX has processed tens of millions of transactions since our Mainnet launched in 2019 and has developed award-winning products such as [Ucam](#) and [Pebble Tracker](#) that are used by thousands of people/devs around the world.

The IoTeX Platform

- Layer 1 blockchain: our blockchain was built from scratch and is governed by 60+ [Delegates](#). Powered by [Roll-DPoS](#), IoTeX has ultra-low fees, 5-second block times w/ instant finality, and EVM/Web3-compatibility, enabling Web3 tools like MetaMask, Remix, Truffle, etc.
- Layer 2 protocols: synchronized with our blockchain, IoTeX has built unique Layer 2 protocols including a real world data oracle (Truststream), DID framework for people/devices ([Identity of Things](#)), cross-chain bridges to Ethereum, BSC, Polygon ([ioTube](#)), and more.
- Developer toolkits: a suite of toolkits to empower builders including [ioPay](#) wallet, [iotexscan](#) explorer, MachineFi [device portal](#), and an extensive set of SDKs. [Chainlink's price oracle](#) is expected to be integrated on IoTeX mainnet soon. Browse our dev-tooling at [docs.iotex.io](#).

MachineFi: Connecting the Real World to Web3

By 2030, the Internet of Things (IoT) will consist of 100 billion machines that produce 80 trillion gigabytes of data – McKinsey estimates the IoT will be worth \$12 trillion in value. Who will own these machines, data, and value? IoTeX's vision for MachineFi is to empower everyday people and businesses to own and control their machines, as well as the data/value they generate.

To empower MachineFi, IoTeX has built first-of-its-kind infrastructure and tools that synchronize with our Layer 1 blockchain:

- Machine Identity: IoTeX is the founder/chair of the [IEEE 'Identity of Things' Standard](#) with participation from Bosch, Lockheed Martin, Lenovo, Ericsson, Huawei, and more.
- Truststream Oracle: a Layer 2 computational oracle that brings verifiable machine data to Dapps
- MachineFi Portal: a [portal](#) where devs/users can register devices, visualize data, and interact with MachineFi Dapps
- Real World Devices: [Ucam](#) and [Pebble Tracker](#) are the first “Powered by IoTeX” devices; Raspberry Pi + Arduino SDKs are launching soon

Proposal for the Aave Community

IoTeX is inspired by what Aave has offered to the crypto industry as pioneers in DeFi and money markets. By bringing Aave V3 to IoTeX, Aave will be the first major money market protocol on IoTeX and expand its user base to our global community of 100,000+ monthly active users. We hope to bring Aave V3 on IoTeX Testnet to start, and eventually launch Aave V3 on IoTeX Mainnet with attractive liquidity incentives to bring DeFi on IoTeX to the next level.

“All of Web3 is an experiment. And we want to jumpstart and contribute to the breakneck pace of innovation happening in the space.” – [Newt website](#)

We couldn't agree more. IoTeX has lived at the experimental forefront of blockchain x IoT for the past 5 years – we've developed prototypes like [AvoBoard](#) that have never been publicly launched, as well as real world products like [Ucam](#) and [Pebble Tracker](#) that are used by thousands of normies, developers, and crypto-natives around the world. To put it simply,

we've put in our 10,000 hours into the blockchain x IoT sector and are the perfect partners to bring new innovations to Web3.

Aave has extensive "real world" experience, most notably with [RWA Market](#) in partnership with Centrifuge. But there is so much more to explore in bringing real world assets to blockchain – with 100 billion machines coming by 2030, machines will be our future workforce and Web3 will ensure the data, services, and value generated by these machines will belong to us, the people. Some MachineFi x DeFi areas we wish to explore with Aave core team, Aave DAO, and Newt:

- Web3 credential based money market services

: a verified on-chain credential to provide money services can unlock a new way of how people lend and borrow money. They can accumulate web3 credentials through interactions with Aave for their on-chain activities. This credential could be location based data which can be verified by Pebble Tracker/meta-pebble for new innovation.

- Collateralization of cash-flow-generating machines

: just as fixed-income securities generate predictable cash flows, autonomous machines such as vending machines, solar farms, and autonomous vehicles will also generate predictable cash flows, allowing machine owners to collateralize and borrow against the principal value + future cash flows of their machines

- Parametric insurance

: machines that produce verifiable data can inform/settle event-based insurance contracts, such as weather insurance (via weather stations), car insurance (via ECUs / telematics units), and health insurance (via wearable devices)

- Fractional ownership of machine networks

: ever wanted to own a piece of a renewable energy farm? The ability to crowdfund capital as part of an Initial Machine Offering (IMO) solves one of the largest problems in the hardware industry, namely the incredibly high capital requirements to build new infrastructure and machine networks.

As next steps, we would love to hear the Aave community's feedback on this proposal to deploy Aave V3 on IoTeX as well as to explore the exciting intersection of DeFi x MachineFi. If we see sufficient interest, we can further detail out an action plan and conduct a Snapshot vote to move things along. Special thanks to Ajit and [@MarcZeller](#) for their ideas and feedback on this proposal!

More on IoTeX

- Onboarding Pack: <https://onboard.iotex.io>
- Our Ecosystem: <https://ecosystem.iotex.io>
- Dev Docs: <https://docs.iotex.io>
- Github: <https://github.com/iotexproject>
- Community Forum: <https://community.iotex.io>
- IoTeX Audit: <https://www.certik.com/projects/iotex>
- Social Channels:

[Twitter](#) (218k followers),

[Reddit](#) (17.5k members),

[Telegram](#) (27k subscribers),

[Dev Discord](#) (15k members),

[YouTube](#) (15.5k subscribers)