

Twitter Thread by Pratham



Pratham

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This is a beginner's guide on mining cryptocurrencies.



Mining 101

Typically, when you transfer money using a service like Paypal, they take a small cut for facilitating the exchange.

In cryptocurrencies, people like you and me act as Paypal and facilitate exchanges of cryptocurrency. We get a cut for this just like Paypal did.

In order to make these transactions happen, our computers need to do some calculations which requires a lot of computational power.

A GPU or a Graphics Processing Unit which is typically marketed for gaming workloads can be used to mine cryptocurrencies.

Why do you need a GPU?

Today, there are so many miners that the "difficulty" of mining cryptocurrencies has skyrocketed, which basically means it takes a lot of computational power to mine crypto which GPUs can provide and CPUs cannot.

(■ This is an oversimplification)

If you are interested in the inner workings of how blockchain and cryptocurrency, then I highly suggest that you read this thread by [@oliverjumpertz](#) .

<https://t.co/gbFs64FY2X>

What actually is a Blockchain?

Bitcoin is breaking record after record, but there must be more to the technology than just crypto, or not? Well, we can take a look at the underlying technology first to understand what it actually provides to us.

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— Oliver Jumpertz (@oliverjumpertz) [February 16, 2021](#)

In short, you need a fairly powerful GPU to mine Crypto profitably.

Most Nvidia or AMD GPUs that were released ~2015 and after should be able to mine well.

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If you are looking to buy a new one then I'd look at these GPUs:

Nvidia

- RTX 3060 ti and above (not the 3060, these are slightly expensive)
- RTX 2060 and above (last gen)
- GTX 1650/1660(budget-friendly)

AMD

- Radeon RX 5700, Radeon RX 580, Radeon RX Vega 56



The pricing and availability for GPUs is all over the place so make sure to check the prices and choose the best one for you.

Here's a good rule of thumb, check the pricing on AMD or Nvidia's site first before making your purchase.

Another thing about GPUs is that most of the time other manufacturers like MSI, Zotac, Gigabyte or Asus sell the same graphics card just rebranded.

They are perfectly legit GPUs so there's nothing to worry about.

Now that you have a GPU, let's get to mining and I have kept this step very simple for all of you.

I've tried out 4 software for mining: Kryptex, Nicehash, Unminable miner, and Phoenix miner.

Typically you need a wallet(kind of like a bank account but free and digital), a pool(mine in a group to maximize profits), and a special miner program to mine.

You can also specifically choose which coin you would like to mine.

Phoenix, Unminable miner come under this category.

Kryptex and Nicehash are much more beginner-friendly.

I spent hours trying to see which ones worked the best and honestly, Phoenix and Unminable really did not work for me.

Kryptex and Nicehash gave me \$10 a day on my RTX 3070, while the others were around \$4.

Both Keyptex and Nicehash seem to have good reviews so I'd choose one of these 2 softwares for mining.

All you have to do is make an account and click a few buttons to start mining.

(Just to be clear, neither of them sponsored this thread)

The screenshot displays the 'Benchmark' tab in the Nicehash software interface. At the top, there are navigation links for 'Dashboard', 'Devices', 'Benchmark' (which is highlighted), and 'Plugins'. To the right of these links are icons for settings, help, and window management. Below the navigation bar, the 'Benchmark Type' is set to 'Standard'. The interface is divided into sections for 'CPU' and 'GPU'. The CPU section shows 'CPU#1' as an 'AMD ryzen 1800x' with '1 / 1' in both 'ENABLED' and 'BENCHED' columns, and a 'Benchmarking' status. The GPU section lists three 'Gygabyte GeForce GTX 1080' cards. Each GPU entry shows '14 / 15' in the 'ENABLED' column and '15 / 15' in the 'BENCHED' column, with a 'Benchmarking' status. A context menu is open over the third GPU entry, showing options: 'Copy All Settings' (highlighted with a mouse cursor), 'Copy Tuning Settings Only', and a list of the three GPU entries. At the bottom left, a 'Benchmark Step (10 / 20)' progress bar is shown. At the bottom right, there is a checkbox for 'Start mining after benchmark' and a large orange 'START BENCHMARK' button.

CPU		ENABLED	BENCHED	
CPU#1	AMD ryzen 1800x Benchmarking	1 / 1	1 / 1	

GPU		ENABLED	BENCHED	
GPU#1	Gygabyte GeForce GTX 1080 Benchmarking	14 / 15	15 / 15	
GPU#2	Gygabyte GeForce GTX 1080 Benchmarking	14 / 15	15 / 15	
GPU#3	Gygabyte GeForce GTX 1080 Benchmarking	14 / 15	15 / 15	

Copy All Settings

Copy Tuning Settings Only

GPU#1 Gygabyte GeForce ...

GPU#2 Gygabyte GeForce ...

GPU#3 Gygabyte GeForce ...

Benchmark Step (10 / 20)

☐ Start mining after benchmark

START BENCHMARK

Any Proof of Stake (PoS) cryptocurrency is profitable to mine, this includes Bitcoin and Ethereum.

Both are great coins to mine.

This is all great but keep a couple of things in mind:

- The lifespan of your GPU will be reduced because it will be under constant load for long periods of time.
- Check your electricity rates to see if mining is profitable for you or not (<https://t.co/k0k3LoPnsK>)

- Mining isn't very good for the environment.

I am not sure how the carbon footprint for mining compares to creating regular fiat currency but it is definitely high.

Correction:

Bitcoin and Ethereum are PoW based (proof of work)

(Both are still very profitable to mine)

Here's the difference between the two.

Image source: <https://t.co/OsmqvKseTV>

PoW vs Pos Simply Explained

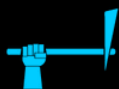
Proof of Work (PoW)



The amount of work done by a particular miner determines his/her possibility of mining a single block and the reward of getting a coin.



The miners get lesser Bitcoins over time. Such smaller incentives ensure less chance of the 51% attack.



The community-bond of the miners of PoW is extremely strong. Thus the possibility of the community to become more centralized increases with time.

Proof of Stake (PoS)



The mining capability of a particular miner depends on how many coins he/she already has.



The 51% attack is ridiculously expensive in the Proof of Stake (PoS) method.



The community-bond of the stakeholders of PoS is not that strong. So, PoS community is more decentralized.