



# ColAUMS Space

NEWSLETTER OF THE AUMS

| ISSUE 1, 2021

## In this issue

President's Address  
What is Bitcoin  
Call for committee reps  
Puzzle: Power chords

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## Upcoming events

Meet&Greet - 12/03, 4.30pm  
Pi-Day Hi- - 15/03, 11-2pm  
Day  
Pubcrawl - 30/04, TBD

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## Contact details

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Have an idea for an article or want to contribute? Contact the editor at [colaums.space@gmail.com](mailto:colaums.space@gmail.com)

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## President's Welcome

Congratulations on finding yourself in possession of our very first ColAUMS Issue for 2021. Whether you are here for the puzzles, proofs and conjectures or just for a delicious slice of pizza, AUMS has something for you!

Our incredible 2021 committee have spent the last few months planning for an awesome year - so strap in for the ride, and reap the benefits that your AUMS membership offers! Come along to our games-and-pizza-filled Meet and Greet, our phenomenal pub crawl and annual (open) ball. The fun doesn't stop there, because you will also hear from inspiring speakers at our talks, and challenge the brightest minds AUMS can offer at our puzzle nights (and the best BBQ chefs at our BBQs).

So, if you think you can out pizza the most pizza filled club on campus<sup>[1]</sup> then jump onto our sign ups and join faster than you can find the cube root(s) of 1.

To all our new and old members, thank you for being a part of our wonderful community and we can't wait to see you all in the year ahead!

- *Bridget Smart, AUMS President*

<sup>1</sup> *Uncontested title awarded by the AUMS committee in 2021*

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## What is Bitcoin

With the news of Elon Musk putting in a \$1.9 billion dollar investment into bitcoin, it brings into question on what bitcoin really is and the impact it could have on the future of society. Bitcoin is a digital currency that was created by an anonymous person under the alias Satoshi Nakamoto. It is a decentralised system meaning no middleman (such as banks) to deal with. The main reason for its appeal stems from lack of control from the government and banks. The catastrophic effects of the 2008 financial crash have led to distrust in the financial system as well as the governments who bailed out the ones responsible. Bitcoin also allows people to make pseudonymous transactions which is recorded on the blockchain database.

Its pseudonymity is due to your wallet address being recorded without being attached to your identity. The blockchain database is described as 'an open, distributed ledger that can record transactions between two parties efficiently and in a verifiable and permanent way'. The records are in blocks and are linked together (like chains) with the use of elliptical curve cryptography (ECC)<sup>[2]</sup>.

Now comes the question, is bitcoin the future of money?

**Bitcoin is a promising alternative payment method and investment, but it is not here to replace our fiat currencies.**

The decentralized nature of bitcoin makes it for convenient payments, but inconvenient when things go wrong. Since no one else has greater power over this system (unlike the bank), account recovery can be virtually impossible. This has resulted in many millionaires unable to access their bitcoin fortune with studies indicating that around 20% of the existing 18.5 million Bitcoin (\$US140 billion) being stranded. Despite this, if people are willing to take on the responsibility for their passwords, as well as making sure their transaction addresses are correct, bitcoin provides an alternative payment that can meet the people's needs.

Bitcoin's high volatility in price will not allow it to replace our currencies but represents a high-risk investment option. As time of writing, the price of one bitcoin sits at \$61 000 AUD with its value having increased exponentially over the past decade. A news article of Elon Musk can increase its value 30% overnight, with falls of over 30% being common as well. Bitcoin is too unstable for daily use, but people who have invested in it has made returns unachievable through the traditional stock market. Bitcoin was born out of a vision of what currency could become in today's digital era. However, the very nature of its technology and excitement surrounding it prevents it from becoming more than an interesting investment choice. It may not replace our current financial system anytime soon, but it may worth putting in a small fraction of money in anyways as no one can predict the future.

<sup>2</sup>Useful links that give insight on how the maths

(cryptography) of bitcoin works:

- <https://tara-annison.medium.com/the-maths-behind-the-bitcoin-blockchain-e5989c4a0fad>
- <https://www.coindesk.com/math-behind-bitcoin>

- Jieun Kim, ColAUMS editor

## Call for comittee reps

Are you interested in becoming a part of AUMS?

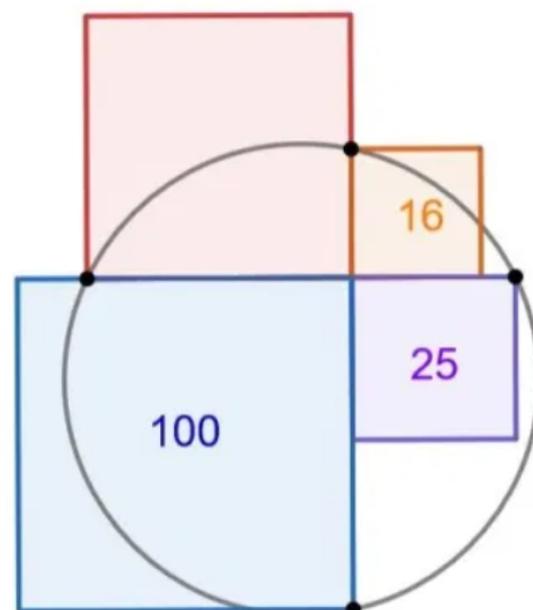
We are looking looking for:

- **first year representative**
- **international student representative**

If you are a first year student or an international student and want to be part of organising our events, let us know!

## Puzzle

Power chords: What is the area of the circle?



<https://twitter.com/Cshearer41>