Hello,

I hope you’re having an excellent 2020! First of all, please join us at the MIT Bitcoin Expo and inaugural Cryptoeconomic Systems conference in Cambridge, MA March 7-8. Tickets are here, and get you access to both events. Here is the speaker list for the Expo (more to be added) and see the papers that will be presented at the Cryptoeconomic Systems conference here.

A large part of the work we do at DCI focuses on cryptocurrency and Bitcoin in particular. However, we’ve always believed that digital money has promise in many different forms, and it doesn’t stop at cryptocurrency. It’s exciting to see the uptick in conversation around digital currency this past year. A Bank of
International Settlements survey of 66 central banks showed that 80% are researching the topic, with 30% saying they had plans to issue some kind of digital currency. DCI is continuing the work we started with central banks in 2016, taking lessons learned from implementation and research on Bitcoin and applying them more broadly. We hope to influence how central bankers and developers are thinking about the future of digital currency, especially around security and privacy. Rob and I authored this article laying out our position: Redesigning digital money: What can we learn from a decade of cryptocurrencies?. The simulation we did in November with the Belfer Center at HKS really highlighted the fact that the impact of digital currency might have far-reaching geopolitical effects.

We’re getting the newsletter out a little late this quarter, but in the next one we’ll have updates from the World Economic Forum, the Sveriges Riksbank, and several papers we hope to put up on ePrint and arXiv next week.

As always, don’t hesitate to reach out if you have any comments, questions, or feedback. And thanks again to our members and funders for helping us to do this work.

Thanks,

Neha

Projects and Research

Cryptoeconomic Systems and MIT Bitcoin Expo 2020
Together with our 42-member Program Committee we commenced a pioneering experiment into interdisciplinary peer review. Based on the feedback of reviewers and ensuing discussions with the editorial team, we selected 26 papers from 80 submissions for CES ‘20. We employed 4 outcome types with different pathways to publishing in the journal. The conference is co-located with the 7th annual MIT Bitcoin Expo on the MIT campus 7 & 8 March. Tickets are already on sale and very inexpensive, so we hope to see you there!

- Event information: https://cryptoeconomicsystems.pubpub.org/ces20
- Tickets via MIT Bitcoin Expo: https://www.eventbrite.com/e/mit-bitcoin-expo-2020-tickets-9101105667

Reminder: All talks from October’s Cryptoeconomics Systems Summit can be found here on the DCI youtube channel.

Get 20% off tickets with code DCI@MITBTCEXPO20.
Good for the first 50 tickets!
The MIT Bitcoin Expo, now in its 7th year, is the foremost student organized conference in the space. With this year's theme of "Building the Stack," the Expo will focus on developing the technology stack for Bitcoin and cryptocurrency ecosystem. This year will also feature a 24-hour hackathon, at which participants will have the opportunity to build for themselves! For more information, check out the website: https://mitbitcoinexpo.org/

Other Projects and Research

- The paper by "Double-Spend Counter-Attacks: Threat of Retaliation in Proof-of-Work Systems" by DCI members and collaborators was presented at the Cryptocurrencies and Blockchains Conference - view slides here
  - Full paper team: Daniel J. Moroz1, Daniel Aronoff3, James Lovejoy2, Neha Narula2, David C. Parkes1 (1Harvard SEAS, 2MIT Media Lab, 3MIT Economics) - Publication forthcoming
- New Project: Mining pools control over 80% of the hashpower in Bitcoin and could conceivably be involved in a 51% attack. Gert-Jaap and others at DCI are currently working on monitoring and analyzing mining pool behavior.
- James Lovejoy - DCI research student and MIT MEng wrote a piece on how 'Vertcoin (VTC) was 51% attacked'. James is the lead maintainer of Vertcoin
Education

- Thank you to 1st year MIT Undergraduate student Raunak Chowdhury for completing his first term as a DCI UROP.
- Fall courses have concluded, the DCI's offering included ‘Blockchain and Money’ taught by Gary Gensler and ‘Blockchain Ethics’ taught by Neha and Rhys
- Thank you to Oceane Boulais for being the TA for our fall course ‘Blockchain Ethics’.
- Rob continues to develop his course on ‘Programmable Money’
- MIT Sloan and DCI’s collaboration course ‘Blockchain Labs’ is getting ready to begin in the spring. The working group program is scoping out the projects for this terms partnership between students and DCI members companies: Deloitte, Fidelity, AT Kearney, Monetary Authority of Singapore and BCG.

Events and Presentations

DCI’s Robleh Ali helped organize and Neha Narula along with Gary Gensler

Watch the simulation here. The event was reported on by Coindesk, The Harvard Gazette, Yahoo Finance, and the Wall Street Journal.

Conferences and Presentations

- **Neha** →
  - Presented: ‘Redesigning Digital Money: What Can We Learn from a Decade of Cryptocurrencies?’ At the Bank of Canada. October 2019
  - Attended: [Cryptocurrencies and blockchain conference at Uchicago](https://www.belfercenter.org/dcw). Chicago, IL. November 2019 and [Large-Scale Consensus and Blockchains](https://www.belfercenter.org/dcw). Berkley, CA. October 2019


- **Sunoo** → [Blockchain in Society: Applications, Economics, Law, and Ethics](https://www.belfercenter.org/dcw): Berkeley, CA

- **Wassim** →
  - Attended: [Lightning Conference](https://www.belfercenter.org/dcw), [Diffusion Hackathon](https://www.belfercenter.org/dcw), [Advances in Financial Technology](https://www.belfercenter.org/dcw), [RadicalXChange](https://www.belfercenter.org/dcw)
  - Presented: [Blockchain for Science conference - talk about CES](https://www.belfercenter.org/dcw)!
  - And [Cryptoeconomics & Climate Change Seminar Series - talk about CES](https://www.belfercenter.org/dcw)

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**Rhys Leaving**

We would also like to say a huge thank you to Rhys Lindmark. Rhys was our Head of Community and Long-term Societal Impact. He has decided although
he loved his time at MIT. He is heading out to SF to work on post-capitalism, meta-rationality, and networked sociotechnical systems, after spending some time with his family over the holidays. If you would like to stay in contact with Rhys you can follow him on Twitter @RhysLindmark.

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**Media**

Gary Gensler - DCI Faculty Advisor’s coindesk article: *Even if a Thousand Projects Don’t Make It, Blockchain Is Still a Change Catalyst* - December 15th, 2019

**In the news:**

- The New York Times quotes Neha Narula in 'Twitter and Facebook Want to Shift Power to Users. Or Do They?'
- DCI’s Tadge interviewed by Olga Kharif for Bloomberg article 'The World’s Most-Used Cryptocurrency Isn’t Bitcoin'
- CES Summit review by Bitcoin Magazine: 'Cryptoeconomic Systems Launched as Open-Source Journal and Conference'
- Michael Casey - DCI Senior Advisor’s authored the following on coindesk.com
  - The Silver Lining in Block.One’s SEC ‘Slap on the Wrist’ - October 8th, 2019
  - Zcash’s Halo Breakthrough Is a Big Deal – Not Just For Cryptocurrencies - October 14th, 2019
  - China Seizes the Blockchain Opportunity, How Should the US Respond? - October 28th, 2019
  - A Decade of Quantitative Easing Has Paved the Way for the Age of Digital Currency - December 20th, 2019
When Private Digital Money Becomes a Significant Part of the Money Supply by LASSE MEHOLM - CEO OF FINANSIT AS