Letter in Support of Responsible Fintech Policy

The Honorable Charles E. Schumer Majority Leader U.S. Senate Washington, DC 20510

The Honorable Nancy Pelosi Speaker U.S. House of Representatives Washington, D.C. 20510

The Honorable Debbie Stabenow Chairwoman Senate Committee on Agriculture, Nutrition and Forestry U.S. Senate Washington, D.C. 20510

The Honorable Sherrod Brown Chairman Senate Committee on Banking, Housing and Urban Affairs U.S. Senate Washington, D.C. 20510

The Honorable Ron Wyden Chairman Senate Committee on Finance U.S. Senate Washington, D.C. 20510

The Honorable Maxine Waters Chairwoman House Financial Services Committee U.S. House of Representatives Washington, D.C. 20510 The Honorable Mitch McConnell Minority Leader U.S. Senate Washington, DC 20510

The Honorable Kevin McCarthy Minority Leader U.S. House of Representatives Washington, D.C. 20510

The Honorable John Boozman Ranking Member Senate Committee on Agriculture, Nutrition and Forestry U.S. Senate Washington, D.C. 20510

The Honorable Patrick J. Toomey Ranking Member Senate Committee on Banking, Housing and Urban Affairs U.S. Senate Washington, D.C. 2051

The Honorable Mike Crapo Ranking Member Senate Committee on Finance U.S. Senate Washington, D.C. 20510

The Honorable Patrick McHenry Ranking Member House Financial Services Committee U.S. House of Representatives Washington, D.C. 20510 Dear U.S. Congressional Leadership, Committee Chairs and Ranking Members,

We are 26 computer scientists, software engineers, and technologists who have spent decades working in these fields producing innovative and effective products for a variety of applications in database technology, cryptography, open-source software, and financial technology applications.

Today, we write to you urging the Committee to take a critical, skeptical approach toward industry claims that crypto-assets (sometimes called cryptocurrencies, crypto tokens, or web3) are an innovative technology that is unreservedly good. We urge you to resist pressure from digital asset industry financiers, lobbyists, and boosters to create a regulatory safe haven for these risky, flawed, and unproven digital financial instruments and to instead take an approach that protects the public interest and ensures technology is deployed in genuine service to the needs of ordinary citizens.

We strongly disagree with the narrative—peddled by those with a financial stake in the crypto-asset industry—that these technologies represent a positive financial innovation and are in any way suited to solving the financial problems facing ordinary Americans.

Not all innovation is unqualifiedly good; not everything that we can build should be built. The history of technology is full of dead ends, false starts, and wrong turns. Append-only digital ledgers are not a new innovation. They have been known and used since 1980 for rather limited functions.

As software engineers and technologists with deep expertise in our fields, we dispute the claims made in recent years about the novelty and potential of blockchain technology. Blockchain technology cannot, and will not, have transaction reversal mechanisms because they are antithetical to its base design. Similarly, most public blockchain-based financial products are a disaster for financial privacy; the exceptions are a handful of emerging privacy-focused blockchain finance alternatives, and these are a gift to money-launderers. Financial technologies that serve the public must always have mechanisms for fraud mitigation and allow a human-in-the-loop to reverse transactions; blockchain permits neither.

By its very design, blockchain technology, specifically so-called "public blockchains", are poorly suited for just about every purpose currently touted as a present or potential source of public benefit. From its inception, this technology has been a solution in search of a problem and has now latched onto concepts such as financial inclusion and data transparency to justify its existence, despite far better solutions already in use. After more than thirteen years of development, it has severe limitations and design flaws that preclude almost all applications that deal with public customer data and regulated financial transactions and are not an improvement on existing non-blockchain solutions.

Finally, blockchain technologies facilitate few, if any, real-economy uses. On the other hand, the underlying crypto-assets have been the vehicle for unsound and highly volatile speculative investment schemes that are being actively promoted to retail investors who may be unable to understand their nature and risk. Other significant externalities include threats to national security through money laundering and ransomware attacks, financial stability risks from high price volatility, speculation and susceptibility to run risk, massive climate emissions from the proof-of-work technology utilized by some of the most widely traded crypto-assets, and investor risk from large scale scams and other criminal financial activity.

We ask you to take a truly responsible approach to technological innovation and ensure that individuals in the US and elsewhere are not left vulnerable to predatory finance, fraud, and systemic economic risks in the name of technological potential which does not exist.

The risks and externalities related to blockchain technologies and crypto-asset investments are neither isolated nor are they the growing pains of a nascent technology. They are the inevitable outcomes of a

technology that is not built for purpose and will remain forever unsuitable as a foundation for large-scale economic activity.

Given these risks and externalities, together with the—at best still-ambiguous and at worst non-existent—uses of blockchain, we recommend that the Committee look beyond the hype and bluster of the crypto industry and understand not only its inherent flaws and extraordinary defects but also the litany of technological fallacies it is built upon.

We need to act now to protect investors and the global financial marketplace from the severe risks posed by crypto-assets and must not be distracted by technical obfuscations which mask an abject lack of technological utility. We thank you for your leadership on financial technology and regulation and urge you to consider our objective and independent expert judgments to guide your legislative priorities, which we remain happy to discuss anytime.

Respectfully,

Sal Bayat Tim Bray Grady Booch Brennan Carley ACM Fellow, IEEE Fellow, IBM Fellow Proton Advisors Cory Doctorow Stephen Diehl David Gerard Jürgen Geuter ART+COM Alan Graham Kelsey Hightower OCL **Geoffrey Huntley** Miguel de Icaza GitPod Patrick McConnell Luke Plant Macquarie University Django Software Foundation Rufus Pollock Matt Ranger LifeItself Labs Jorge Stolfi Steve Song University of Campinas Network Startup Resource Center Dave Troy Bruce Schneier 410 Labs Inc. Štefan Urbánek Darren W. Tseng **Open Knowledge Foundation** Nicholas Weaver Adam Wespiser SimSpace Corporation International Computer Science Institute Jamie Zawinski Molly White Netscape Developer

Affiliations are provided for identification purposes only. This letter expresses the views of the individual signatories, and should not be taken to be an official position of the institutions.

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Appendix: References

The resources offered here were chosen by the authors of this letter as useful reference material only. The inclusion of a paper and/or author in this list does not constitute an endorsement of this letter or our views.

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