

GradCoin: A poor-to-poor electronic cash transfer system

Siddhant Jain¹

Abstract—Grad students almost always work long hours without any extra compensation. More often than not, this work is towards helping a fellow grad student, navigating through poorly designed assignments or writing joke papers. While all of this work is important, none of this work is recognized. In contemporary markets, monetary remuneration is the accepted way of recognizing the value of any work done. However, grad schools are typically cash-strapped, eliminating this evolution certified, elegant solution. In this work, we (I?) introduce *GradCoin* as a modern day solution to an age-old problem.

I. INTRODUCTION

Quantification of work done as a grad student has come to rely almost exclusively on pedantic institutions serving as trusted third parties to process published work done under the influence of the latest trends and strict deadlines. While the system works well enough for most work that advisers want to be done, it still suffers from the inherent weaknesses of a citations based model. Completely non-publishable transactions are not really possible, since citations cite publications as a necessary requirement. The cost of publication increases transaction costs, limiting the minimum practical transaction size and cutting off the possibility for small casual transactions. This limits grad students from involving themselves with enthusiasm in activities like helping another grad student, figuring out poorly written code with no documentation and going beyond organising themselves into a grad student association.

What is needed is an electronic payment system based on reputation instead of money, allowing any two willing parties to transact directly with each other without the need for potential publications or monetary gains. Transactions that are monetarily impractical to fund but quantitatively valued by another system would protect grad students from having low output from seemingly unproductive times. In this paper, we propose a solution based on a similar work of measuring value where none existed[1].

II. TRANSACTIONS

In this system, any grad school transaction can be measured by a suitable amount in *GradCoin*. As an example, a grad student can list their services to debug tensorflow code with an hourly rate of x *gradcoin*. After many frustrating hours of work that goes into this endeavour, the outcomes in the conventional system are generally grim leading to

high cases of nihilism in grad students. In the *GradCoin* system, however, instead of grudging about this time they will never get back, the grad student can now looking at their ever increasing *GradCoin* balance which they can use to get another grad student to do some meaningless work for them. Thus, *GradCoin* helps perpetuate the cycle of meaningless work in the academic world by employing concepts from traditional economics, where paper money has been used to achieve similar results in the real world.

III. POST GRAD SCHOOL

A serious reader of this casual paper will note that *GradCoins* are useful even beyond grad school. A healthy *GradCoin* balance can be used as a proxy for absent citations of work done during grad school. Employers in the industry can note the affinity of the student to carry out meaningless work for zero-value remuneration by looking at their *GradCoin* balance. Employers in Academia will find high networth individuals (in *GradCoins*) attractive as they in turn will be able to fund a new crop of grad students who now get *GradCoins* for their work (instead of peanuts, which perish easily and are difficult to store in large quantities. They also suffer from all other downsides of bullionism[2])

IV. CONCLUSION

Our interdisciplinary work that uses Block Chain technology can solve many problems that plague the community that created the technology in the first place. We recognise that our solution currently suffers from Initial Value Problem, where no grad student is willing to work on building *GradCoins* without being recognised for the work done and *GradCoins* are the only way that has been proposed so far to recognise any such work done. In future work, we intend to come up with solving this problem through instruments like undergrad summer internships which have been well identified as another solution for lack of cheap labour by both academic and the start-up communities.

ACKNOWLEDGMENT

The author would like to acknowledge Point Cloud Library that takes a long time to build affording the author some free time to work on this idea.

REFERENCES

- [1] Satoshi Nakamoto, Bitcoin: A peer-to-peer electronic cash system, <http://bitcoin.org/bitcoin.pdf>
- [2] <https://en.wikipedia.org/wiki/Bullionism>.

*This work was done while waiting for deep neural networks to converge

¹H. Kwakernaak is with Faculty of Electrical Engineering, Mathematics and Computer Science, University of Twente, 7500 AE Enschede, The Netherlands h.kwakernaak@papercept.net

²P. Misra is with the Department of Electrical Engineering, Wright State University, Dayton, OH 45435, USA p.misra@ieee.org