**Proposed Title:**

**“The Future of Secure Market Transactions through DeFi.”**

In leu of the recent events that took place in the stock and cryptocurrency markets involving market entities stopping trading on certain pairs when not in there favor, I have decided to write a narrative explaining and arguing why people will generally start adopting Decentralized Finance(DeFi) through Decentralized Exchanges (DEX’s) along with how these practices are more secure than the institutions in place. A DEX is essentially an exchange that is not controlled by a single entity typically deployed with a blockchain architecture under its hood. This allows for the sharing of voting rights between parties. The beauty of this is that no single entity can make the decision to shut down trading pairs, unlike what Robinhood did to protect its own interests. This narrative will not only argue the theory of why this should be implemented but how the technology is used to secure transactions and secure distribution of rights within the market. Most popularly, blockchain applications are thought of to solve the Byzantine General Problem. (BGP) This informational will support the validity of these technologies by arguing how it solves the BGP and why this matter’s when it comes to securing transactions on a distributed ledger.

**Proposed Format:**

-Abstract

-Intro : What is Defi, what is DEX, what is the problem with the current institutions.

-Intro: Popular DEX and Protocols:

-Technical Use Case Example 1: How does is solve the Byzantine General Problem.

-Technical Use Case Example 2: How does is solve the Byzantine General Problem.

-Technical Use Case Example 3: How does is solve the Byzantine General Problem.

-Conclusion : How it’s safe and why it should be used.

-Future Work:

**-**References**:**

**Proposed References:**

Ariah Klages-Mundt, Dominik Harz, Lewis Gudgeon, Jun-You Liu, and Andreea Minca. 2020. Stablecoins 2.0: Economic Foundations and Risk-based Models. In Proceedings of the 2nd ACM Conference on Advances in Financial Technologies (AFT '20). Association for Computing Machinery, New York, NY, USA, 59–79. DOI:https://doi-org.ezproxylocal.library.nova.edu/10.1145/3419614.3423261

Benjamin Livshits. 2020. Technical perspective: Analyzing smart contracts with MadMax. Commun. ACM 63, 10 (October 2020), 86. DOI:https://doi-org.ezproxylocal.library.nova.edu/10.1145/3416259

Danil Annenkov, Mikkel Milo, Jakob Botsch Nielsen, and Bas Spitters. 2021. Extracting smart contracts tested and verified in Coq. In Proceedings of the 10th ACM SIGPLAN International Conference on Certified Programs and ProofsCPP 2021Association for Computing Machinery, New York, NY, USA, 105–121. DOI:https://doi-org.ezproxylocal.library.nova.edu/10.1145/3437992.3439934

Lewis Gudgeon, Sam Werner, Daniel Perez, and William J. Knottenbelt. 2020. DeFi Protocols for Loanable Funds: Interest Rates, Liquidity and Market Efficiency. In Proceedings of the 2nd ACM Conference on Advances in Financial Technologies ( AFT '20 ). Association for Computing Machinery, New York, NY, USA, 92–112. DOI:https://doi-org.ezproxylocal.library.nova.edu/10.1145/3419614.3423254

Q. Liu, L. Yu and C. Jia, "MovER: Stabilize Decentralized Finance System with Practical Risk Management," 2020 2nd Conference on Blockchain Research & Applications for Innovative Networks and Services (BRAINS), Paris, France, 2020, pp. 55-56, doi: 10.1109/BRAINS49436.2020.9223274.

Youssef El Faqir, Javier Arroyo, and Samer Hassan. 2020. An overview of decentralized autonomous organizations on the blockchain. In Proceedings of the 16th International Symposium on Open Collaboration ( OpenSym 2020 ). Association for Computing Machinery, New York, NY, USA, Article 11, 1–8. DOI:https://doi-org.ezproxylocal.library.nova.edu/10.1145/3412569.3412579