



BA/SA:

## Providing Liquidity in Decentralized Finance

If you've ever bought or sold an asset (e.g. a stock or cryptocurrency) on an exchange, you will know that the price you can sell for is always lower than the price you can buy for. The difference between these prices is called *spread*. Wouldn't you want to be on the other side of this for once? That is, offer to buy and sell an asset at the same time for slightly different prices and make a profit from the difference. This is broadly speaking what *market makers* or *liquidity providers* do.

Recently, the rise of Decentralized Finance (DeFi) has brought with it a large number of decentralized exchanges (DEX) such as Balancer, Curve or Uniswap. These make it very easy to become a liquidity provider by simply depositing into their liquidity pools. Another nice aspect of these decentralized exchanges is that all trades are publicly available in the blockchain. This provides us with the perfect opportunity to experiment with real market data. With the release of



Uniswap V3, liquidity providers must choose a price range in which they want to provide their liquidity. We want to analyze how liquidity providers can maximize their profits by choosing the right price range.

**Requirements:** This project will involve programming in a language of your choice, programming smart contracts in Vyper or Solidity and you will need to be able to work independently. Interest in finance and blockchain is a plus. We will have weekly meetings to discuss open questions and determine the next steps.

**Interested? Please contact us for more details!**

### Contacts

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