



BA/SA:

Providing Liquidity in Decentralized Finance

If you've ever bought or sold an asset (e.g. a stock or crypto currency) 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. We can analyse how



liquidity providers can maximize their profits and trades can find the optimal trade on these exchanges.

Requirements: This project will involve programming in a language of your choice 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

- Robin Fritsch: rfritsch@ethz.ch, ETZ G63